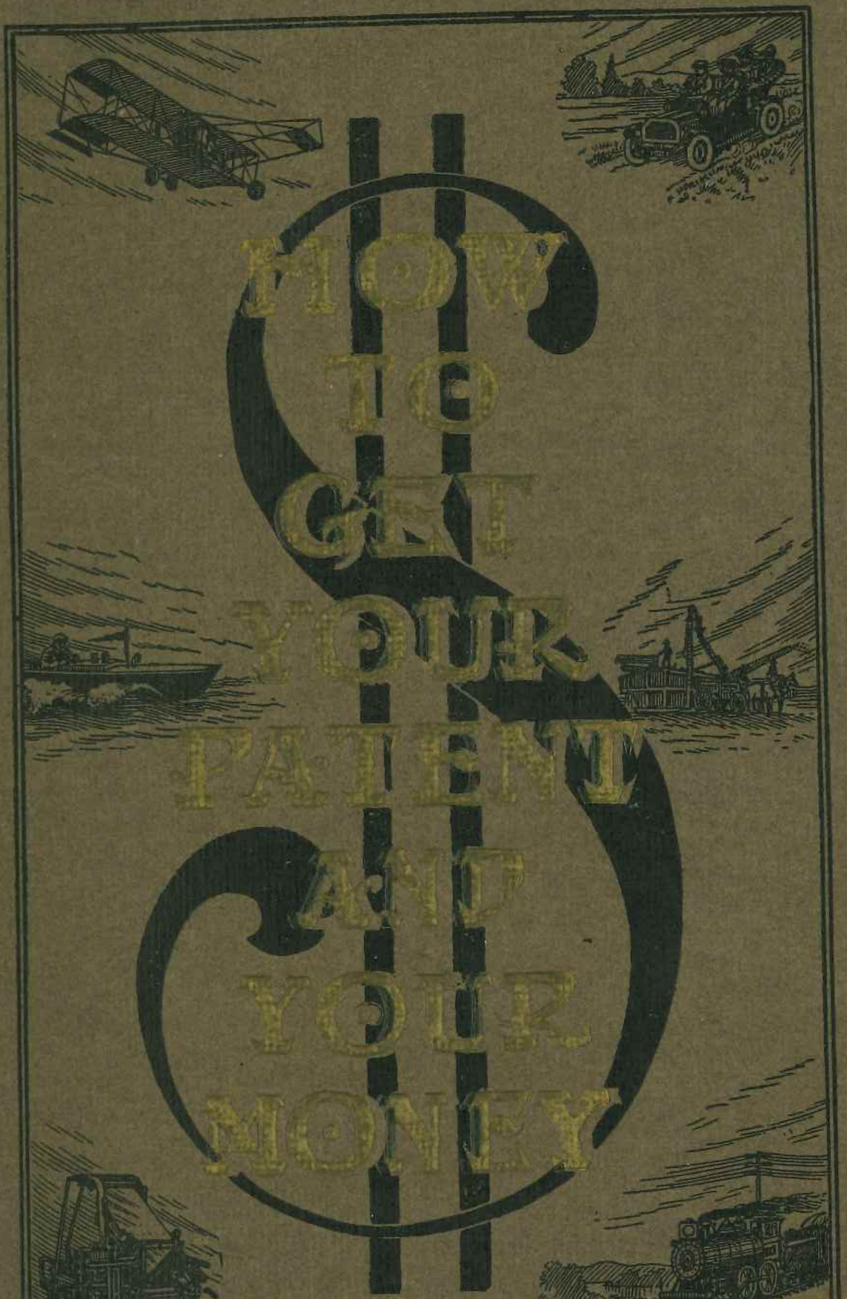
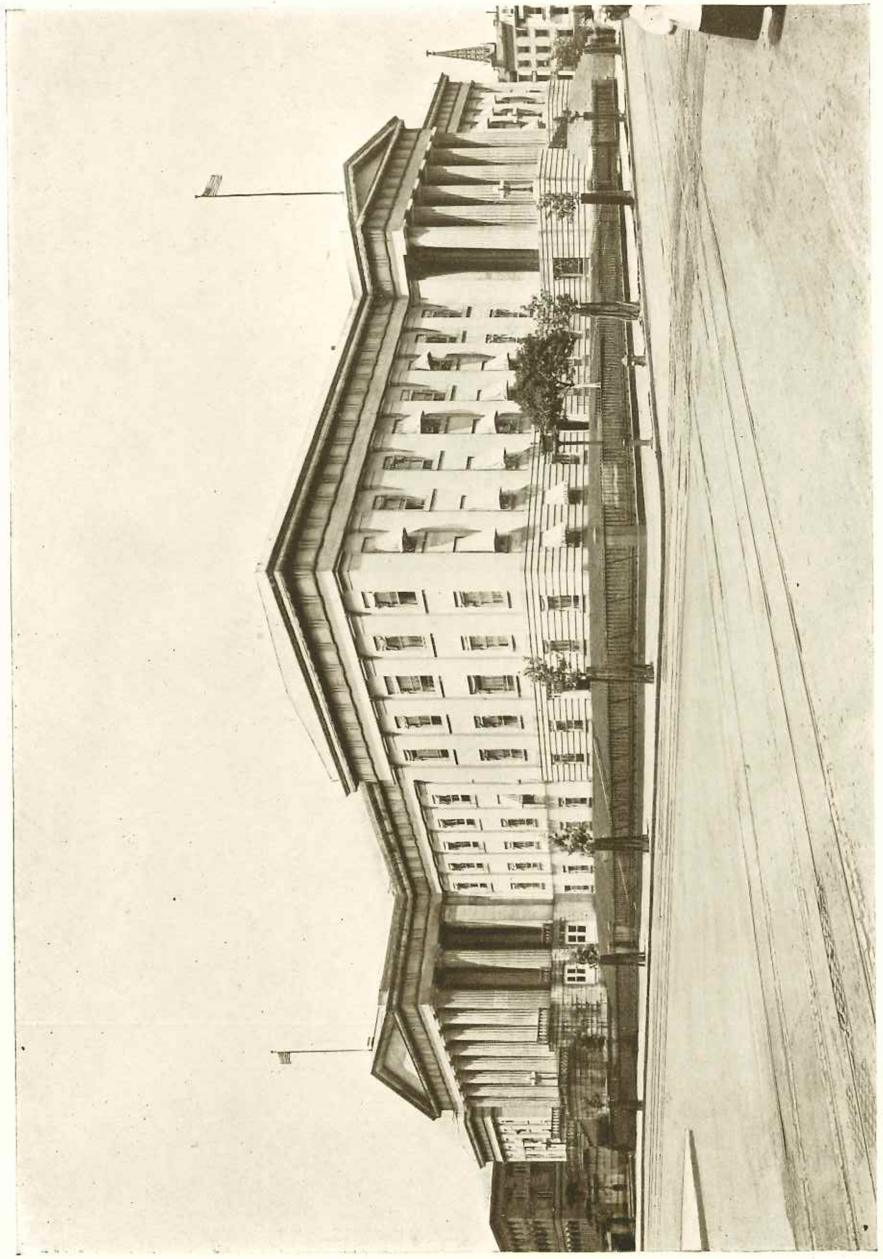


HOW TO GET YOUR PATENT AND YOUR MONEY



VIEW OF THE PATENT OFFICE FROM OUR BUILDING

HOW TO GET YOUR PATENT AND YOUR MONEY

RANDOLPH & BRISCOE
ATTORNEYS AND COUNSELLORS AT LAW
Experts in Patents, Trade-Marks and Copyrights
Members of the Association of Registered Patent Attorneys of the United States
618 F Street Northwest
WASHINGTON, D. C.

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BY
RANDOLPH & BRISCOE, Inc.

W. F. ROBERTS COMPANY
WASHINGTON, D. C.

Riches of the Mind

IDEAS are the stepping-stones to success.

Ideas which nobody can steal from you are certified checks you hold on the wealth of the world.

If you patent your ideas, they are yours. You can sell them in the markets where wise men purchase.

A patent is your defense against the pirates of business, the small men who try to grow fat on the fruits of other minds.

If you had twenty dollars and a thief snatched it out of your hands you would regard it as an outrage and you would call in the officers of the law to avenge you.

If you have an idea which adds to the wealth, the amusement or the industrial development of men, you do not want its value taken from you. The patent law is your defense, your only defense, against such robbery.

In the old days men grew rich by arms and might. Today money is amassed through invention and mentality.

Protect your inventive gift and you will win the plaudits and the treasure of your fellows.

Let your ideas go unpatented and you will be unpaid.

A man seeks protection for his property.

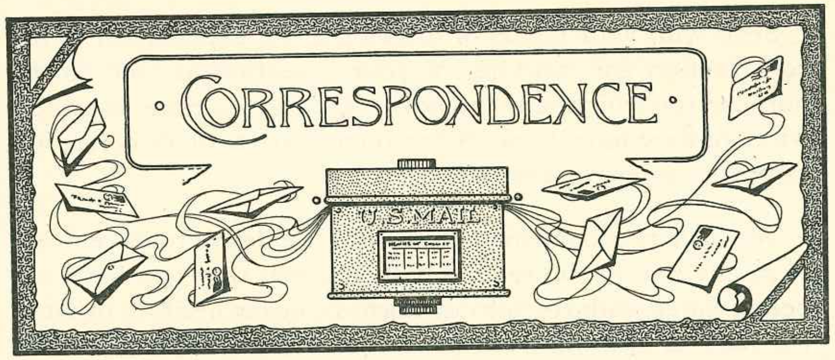
Patents are the protection of mental productiveness—mental prosperity.

A patent, secured for you by a good lawyer, is good security for you.

A patent, managed by a bad lawyer, is mental suicide.

Think! think! think! thought has builded the banks and the bulwarks of the world. When you have a thought which is worth money, protect it, throw a fence around it.

And the way to do that is to patent it—immediately, securely, wisely.



CORRESPONDENCE

Please Give Close Attention to the Following Directions. It Will Save Trouble For You as Well as For Us

ALWAYS give your name and address in full, no matter if you have done so before, and always refer to your previous business or your last previous letter. Attention to these points prevents, in a large correspondence, any possible delay or mistake. There are always duplicate or similar names, and the address and nature of previous business an unfailing key to the right one. A "fancy" signature may be good on a check, but it is apt to be a source of trouble at the foot of a letter.

Always put your full name and address on every model you send us, both on the outside of the package and on the inside, on the model or on a tag attached to it. It is often difficult and sometimes impossible to identify an unmarked model, especially if the written description sent under separate cover is indefinite or incomplete; which means trouble for us and delay for you.

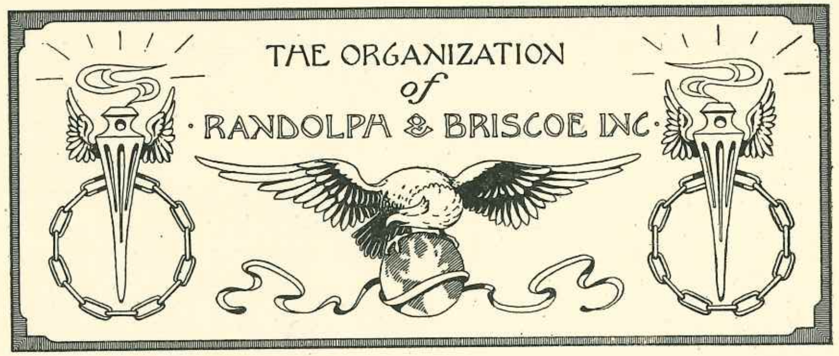
If you wish your model returned, remit the necessary postage or express charges.

Send with your model or drawing a full explanation of the construction and working of your invention as well as the purpose for which it is intended. This saves time, as otherwise we may have to write for further particulars before we can make an intelligent search for you.

We have no dissatisfied clients and we desire to have none. If in any matter, however small, you feel that you have not been treated with the utmost fairness, never hesitate to write us, fully presenting your grounds for complaint. We will give your letter prompt, courteous and careful attention and thank you for sending it.

Whenever possible avoid waste of your time and ours in sending inquiries on points fully covered in this book. It contains an unusual amount of condensed and accurate information on all the questions which our large correspondence shows are frequently asked, and on a good many more. We have published it as a book to be kept for reference and consulted on just such points. To this end, it has been very fully and carefully indexed. If you wish information on any point look in the index first, and see if the point is covered. If you find it is not, write us. If you find your question answered on the page referred to in the index, you will have saved time and postage.

Letters describing your invention should include all matter that you think will help us to a clear understanding of it, but all other letters should be as brief as possible consistent with clearness, and confined to inquiries or information on the business under consideration.



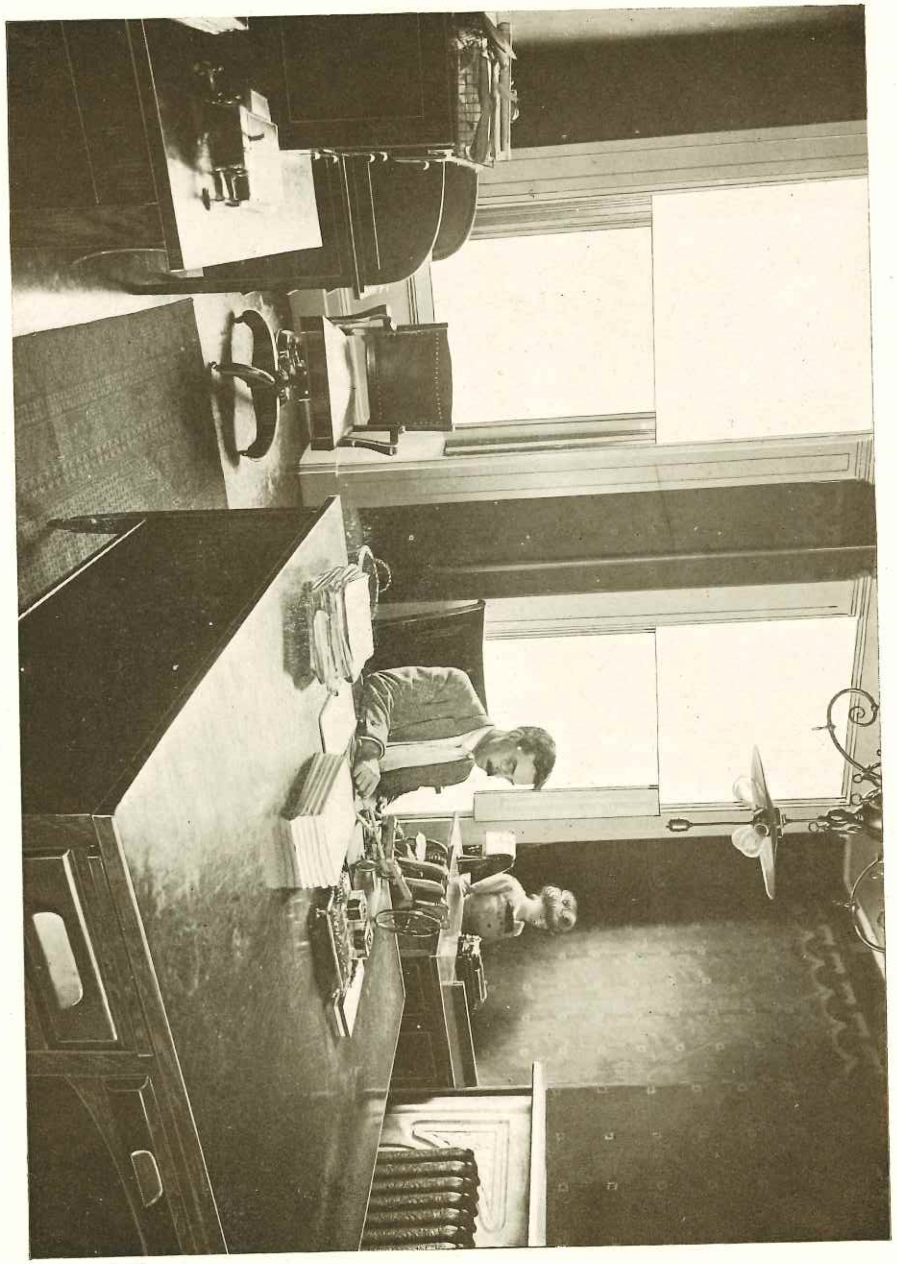
THE ORGANIZATION of · RANDOLPH & BRISCOE INC ·

THE patent business of the country naturally centres in Washington. Here are the records of the Patent Office, and here is its examining corps, before some one of whose members all applications for letters patent or for registry of trade-marks and labels must pass for review and criticism. That such application may be facilitated and much time saved by the employment of competent attorneys on the ground with ready access to the Patent Office for oral discussion of cases with the examiners and prompt filing of amendments and other documents, is obvious. This is admitted by all the large patent firms located in other cities, practically all of whom are represented in Washington, and that inventors have come to see the great advantage of sending their cases here and avoiding the delays, and occasional misunderstanding, incident to passing the case and the actions and amendments through two or more attorneys' offices, is abundantly shown by the large number of applications filed directly through Washington patent attorneys.

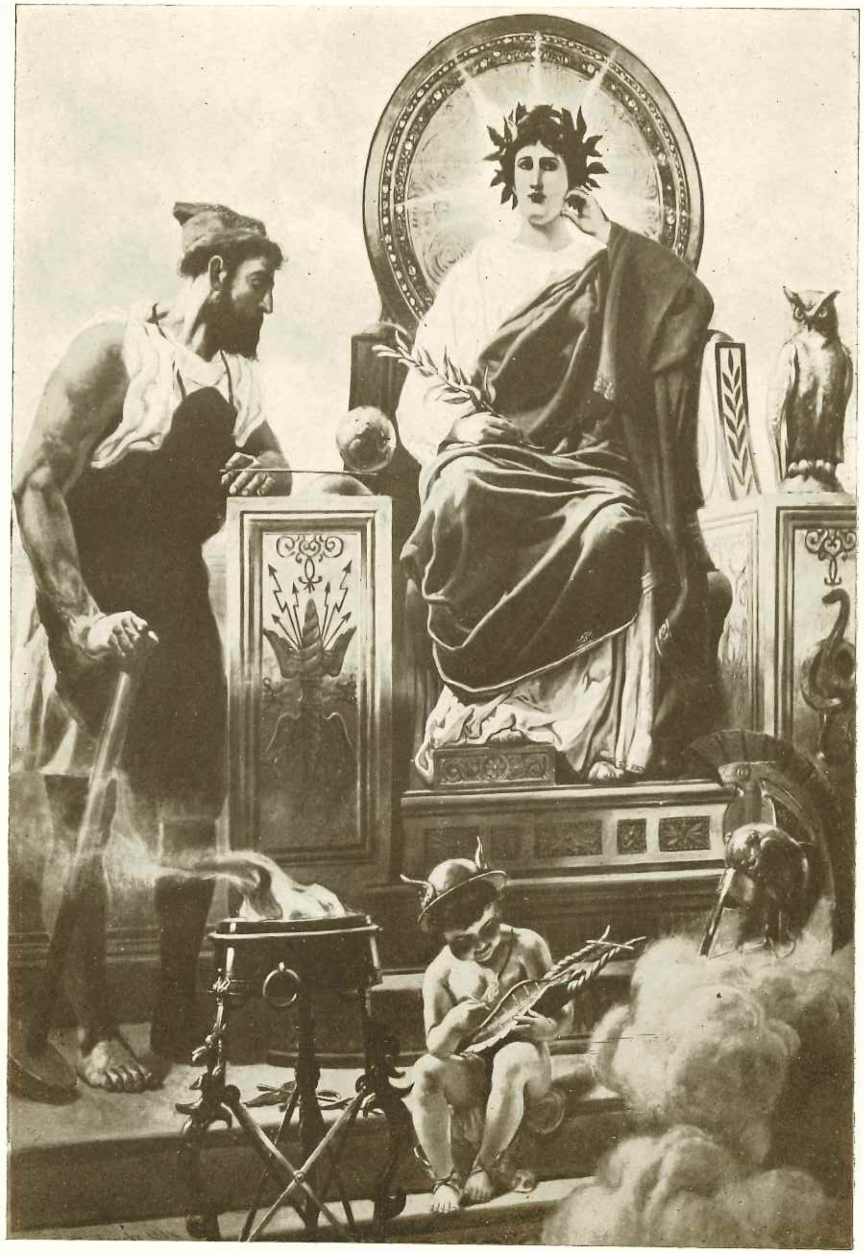
Inventors and others requiring the skilled services of a special profession involving a high order of legal as well as mechanical attainment are widely scattered over this and other countries. This necessarily involves advertising, and it is universaly recognized that the successful conduct of a large and professionally efficient patent business is possible only through wide publicity, and that securing this publicity through advertising is legitimate and proper in so far as the advertising is carried on with strict regard to square dealing and professional ethics. It is now generally conceded that proper advertising by patent attorneys is professionally ethical. It is to be regretted that there has been more or less misuse by some concerns of this advertising privilege, in the publication of misleading advertisements, promising what cannot be performed, or otherwise seeking by indirect suggestion, if not directly, to deceive the inventor. It is, and always will be, the practice of Randolph & Briscoe, Inc., to promise in their advertising only what they perform, and to do so in clear and plain language, and without suggestions which may lead to misunderstanding on the part of the inventor.

The basic idea in the organization of Randolph & Briscoe, Inc., was the building up of a strong and professionally efficient organization, not merely for patent soliciting (the securing of Letters Patent), but for all branches of the skilled technical and legal work pertaining to patents, that it might be fully justified in presenting its claims to the confidence of the public.

The organizers recognized as a first requisite that the active head of their business should be a patent attorney of the highest ability and standing, and that the business should be conducted through him, with the aid of a competent staff of associate patent lawyers and employees having special skill in the branch of the work entrusted to each, and that in this respect the organization should differ from many advertising patent soliciting concerns carried on by persons who are skilled patent attorneys, and are incompetent themselves to do even the work of soliciting patents, or themselves to give



MR. RANDOLPH'S PRIVATE OFFICE



THE GENIUS OF INVENTION

to their clients the professional advice which every client has a right to expect from his solicitor.

With an efficient staff for the handling of all the various branches of patent work, the next requisite was that the organization should have the co-operation, moral support and guidance of men of high business as well as professional standing, and ample means, who would be actively interested in placing the advertising soliciting business on as high a level as that of National Banks and Trust and Title Companies, so that those entrusting their interests to Randolph & Briscoe, Inc., might feel assured that they would be safeguarded in all respects.

These results have been fully accomplished, as our record shows.

That the interests of clients are in the hands of the best possible legal talent and receive prompt and competent attention is vouched for by the personnel of the organization, which, in addition to the legal staff, comprises a Board of Directors and an Advisory Board of men of such experience and standing in the business world that the fact of their management of the organization must commend itself to all those who need legal services in connection with patent matters.

To make it possible to maintain such an organization as has been built up under the name of Randolph & Briscoe, Inc., and to enable it to reach its full value to the public, it is necessary to give wide publicity, both to the organization itself and its personnel, and to the special advantages it offers to the public in safety, reliability and efficiency, on all which points the names of those connected and associated with it afford full assurance.

Thus, in presenting this booklet on patents to the inventor and the public generally, we seek to make some distinction between the information we give therein and the misleading literature that is frequently sent out by purely patent soliciting companies who get business only to delegate its performance to others. Patent soliciting is but one branch of the Randolph & Briscoe business, and this is in the direct charge of our Mr. Randolph. Patent Examination, Validity and Infringement investigations, the Examination of Titles to Patents and Patent Litigation form an important part of our work and receive the attention of our skilled associate lawyers.

OUR SYSTEM

Invention creates wealth. The tangible property owned in this country today that is the joint product of inventive genius and invested capital runs into thousands of millions. It has enriched a host of inventors. That it has not enriched thousand more is due, in varying degrees, to three principal causes: Failure to patent useful inventions; failure to obtain patents that adequately protect the invention; failure to get the invention to market—to bring it to the notice of the man who needs it.

The first is the fault of the inventor himself, or it results from his inability to pay the cost of a good patent. The second is the result of carelessness or inefficiency on the part of the attorney who represents the inventor before the Patent Office. The last can be avoided in the case of any invention of real merit and usefulness by a proper system for placing the invention before the public, bringing the inventor into contact with business men who need the idea he has brought forth.

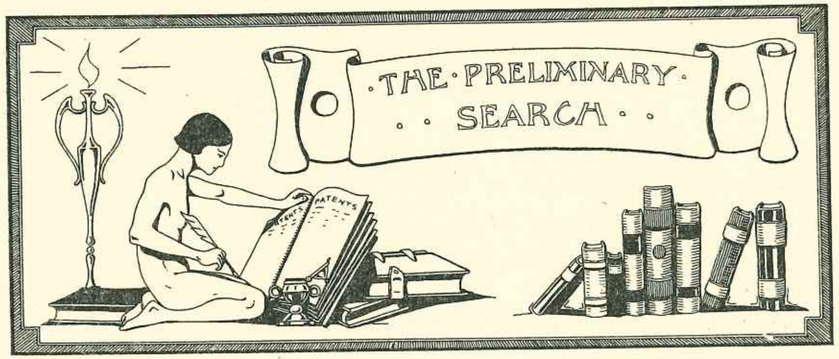
Randolph & Briscoe, Inc., an association which combines the advantages of business intelligence and experience, advertising ability and wide connection with manufacturers and other men of capital, with recognized professional standing and competency, offer to the inventor a service adapted to his needs on all these points.

If means are lacking to protect his invention by a patent, the inventor can send us a sketch and description and obtain a report as to patentability without charge. If favorable, the report is accompanied by a refund certificate guaranteeing, if an application is made and finally rejected, the return of all fees paid us for the preparation and prosecution of the case. With this in hand, the inventor rarely fails to obtain enough money, by assigning a small interest in his invention, to make and prosecute his application. This plan has helped thousands of inventors to protect valuable and subsequently profitable inventions. It is probable that Drawbaugh's first conception of the telephone was prior to Bell's. His failure in proving reduction to practice, and, above all, his failure to make prompt application for a patent, defeated him when, years later, he sought to establish his legal priority. If he could, in his extreme poverty at the time, have obtained such a patentability report and certificate, as any inventor of any patentably new device can now obtain without cost from Randolph & Briscoe, Inc., he could, if he had made the invention, as he subsequently claimed, have secured enough assistance to obtain what would have been by far the earliest telephone patent, with millions of profit to himself.

Money paid for a patent that does not fully protect the invention, that does not contain the broadest claims that the inventor is entitled to, is likely to be money thrown away. People who buy patents, in cases where the proposed investment is at all large, look up this point carefully, usually with the aid of competent patent attorneys. In this we never fail our clients. Mr. Randolph, who is our managing attorney, has had over fifteen years of active and successful practice as a patent solicitor and expert, and is widely and favorably known, as may be inferred from the letters published elsewhere. He has under him a staff of able attorneys and assistants. In interferences, infringement proceedings and appeals our clients can rely on the best professional service to be had in a city where the best congregate. Your invention, if intrusted to us, will be protected as far as human ingenuity and knowledge of the law and the state of the art can go.

Having perfected his idea and having protected himself by a patent, the inventor looks for the tangible reward of his work, which has often been accompanied by a good deal of personal sacrifice. In a few cases he can himself use the invention, or his market for it has been already made; in a majority of instances, however, he needs, according to his plans or necessities, a backer or a purchaser. The average attorney, no matter how competent and faithful, must leave him at this point. He can take him no farther. The chances are that somebody, somewhere, perhaps many people, want what he has, and are willing to pay for it in cash, or to manufacture and sell it on royalty; but he may not, and frequently does not, know how to get his invention before them. In this we can help him materially.

We are in touch with many thousands of business and manufacturing concerns throughout the country, and, with the interests of our clients in view, we have in the last few months largely increased such connections. We are constantly in receipt of inquiries for new inventions in various lines. We have a large number of classified lists of manufacturers and other capitalists who are on the lookout for promising inventions in various industries and lines of investment, and are adding to them daily. We have a system of our own through which we enable the inventor to reach people whose manufacturing requirements or whose usual investments are in the same line as his inventions. These general methods are supplemented, where the case permits, by personal effort. We are always improving our facilities in this direction, with the intention of giving our clients the best possible service. In addition we advertise all patents taken out through us in papers having a united circulation of 5,000,000, free of charge.



If you have perfected an invention on which you wish to secure patent protection, you should have us make a search of the Patent Office records and advise you as to the patentability of the invention. We make a thorough search in all cases and render an honest opinion as to patentability, and in event we report that an invention is in our opinion patentable, we accompany our report with a refund guarantee certificate showing that we are prepared to refund our prosecution fee should application be filed through us and we then fail to secure an allowance of patent. In some instances inventors may be unable to protect their inventions owing to lack of funds, and for this reason we make FREE SEARCHES and by furnishing a refund certificate enable the inventor to negotiate with others having the necessary capital to pay the expense of securing the patent and promoting the invention. This refund certificate is given only in cases which we report favorably and inasmuch as we are willing to stake our prosecution fee on the soundness of our judgment and the opinion given is that of a well-known, responsible company headed by an able patent lawyer, associated with representative men in the legal profession and business world, it should not be difficult, in view of such report, for the inventor to secure the desired financial assistance.

The system which Randolph & Briscoe, Inc., have recently adopted, of making all patentability searches without charge, making them with the same accuracy, care and diligence that have in the past characterized their paid searches, and accompanying favorable reports with refund certificates, enables thousands of inventors to protect and hold the fruits of their genius which would otherwise be lost to them.

Models and Sketches

If you desire a search, send us a model or sketch with a brief and clear description, and in your description make plain the working of the several parts and the advantage claimed for their manner of working as well as for the invention as a whole. Models are not required by the Patent Office except in perpetual motion applications and in a few other very rare and special instances. Frequently they are of value to the attorney in illustrating and explaining the inventor's description. When they are not too bulky and expensive to ship it is well to send them. In the majority of cases, however, a clear sketch and description will be sufficient for the purpose. A sketch may be very rough and yet be clear as to the necessary points. This policy was determined on as a real economy to us, in view of the fact that with efficient preliminary searches as the basis of our patent soliciting business, this branch of our work, in which we employ examiners that are registered Patent Attorneys, would be most effectively advertised. Further, the patent profession owes to the inventing public encouragement as well as guidance and we desire to maintain a professional position as liberal and helpful to the public as it is possible to make it.

Our opinion as to patentability is based on a careful examination of the *Patent Office Records,* and we obligate ourselves to report exactly what we find and in every way to discharge the duty which every attorney owes his client. *If a model is sent it should be marked distinctly with the inventor's name and address.*

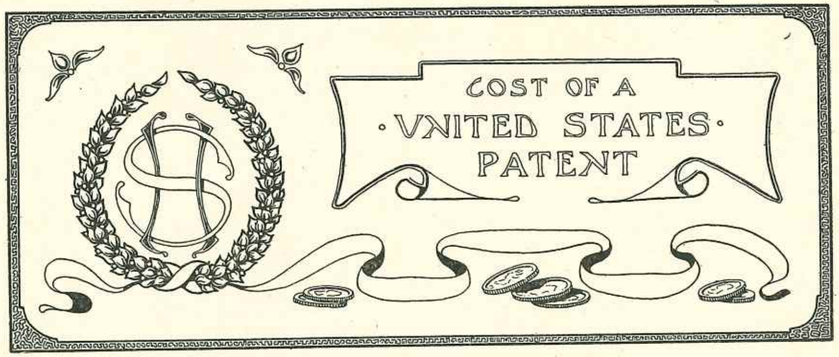
Report as to Patentability

On receipt of your sketch or model and description, and after careful examination thereof, we make a thorough search of the records of the Patent Office. If we find your idea unpatentable by reason of prior patents, or if any prior patents in our opinion closely approach it, we shall so advise you, sending you copies of such patent or patents. If, on the contrary, your invention is in our opinion patentable we shall so report, sending you with our report our refund certificate, which shows that we are willing to stand by our opinion to the extent of our fees.

This service is without any cost to you whatever. We do not *pretend* to render it, by making a haphazard report based on a "desk search." We *do* render it, making a search in the Patent Office in every case, exactly as we formerly did when we made the full charge of $5 for the service. It involves expense, but it pays us in satisfied clients and increased business.

Where possible, study the leading patents in the lines of invention which interest you. They will show you what has been accomplished, what other inventors have been aiming at, and will stimulate your own inventive ideas.

Seek out what is wanted in lines in which patents have already been granted and work to supply it. Get the result and your reward is certain. Don't misdirect your inventive abilities.



COST OF A UNITED STATES PATENT

This in simple cases, requiring not more than one sheet of drawings, is $70. Of this the attorney's fee is $30, the cost of one sheet of drawings is $5, and the First Government Fee, paid into the Patent Office, is $15, the Final Government Fee being payable at any time within six months after the patent is allowed, at the applicant's convenience. The first three amounts named, $50 in all, must be paid in full when the application is ready to be filed. A so-called "prosecuting fee" is added by many attorneys for conducting the case before the Patent Office. It is to be distinctly understood that we make no separate charge for this service, and that the entire cost, not only of preparing and filing the application, but of prosecuting to final action by the Examiner in charge, including all personal appearances, arguments and amendments that may be necessary, is covered by the original fees. If the cost of the application, by reason of additional drawings or otherwise, is likely to be in excess of our minimum charge, you will be informed of it in advance.

If you have received from us a favorable report and desire us to proceed with your application, forward us $20 on account. We will then prepare your application and forward it to you for signature. The papers consist of the petition, power of attorney, copy of drawings, specification and oath. If the papers are satisfactory you should execute them as indicated in pencil, and return them to us with $15 Government fee and the balance of our attorney's fee, and we will file them at once.

Fees. When Payable

These in a simple case, such as above mentioned, are as follows:

Payable in advance—	
Advance Fee	$20.00
Payable after signing application—	
Balance of Attorneys' Fee	10.00
One Sheet Drawings	5.00
First Government Fee	15.00
Payable within 6 months after allowance—	
Final Government Fee	20.00
	$70.00

Specification and Drawings

Read these carefully. Other papers are in set and regular form in compliance with law and are substantially similar in all cases. The drawings and specification, the latter including the claims, form the gist of your application, framed by skillful and experienced men in language and drawings necessarily made somewhat technical by the requirements of the Patent Office, but as simple and clear as possible under the circumstances; and these are to be the life of your patent. All courts, experts and attorneys hereafter will go to the drawings and description to understand your invention, and you are bound by what is there shown and described, and what is not there and so stated that any person skilled in the art can understand it you cannot claim as a feature of the invention, even though it may be yours originally.

The Claims

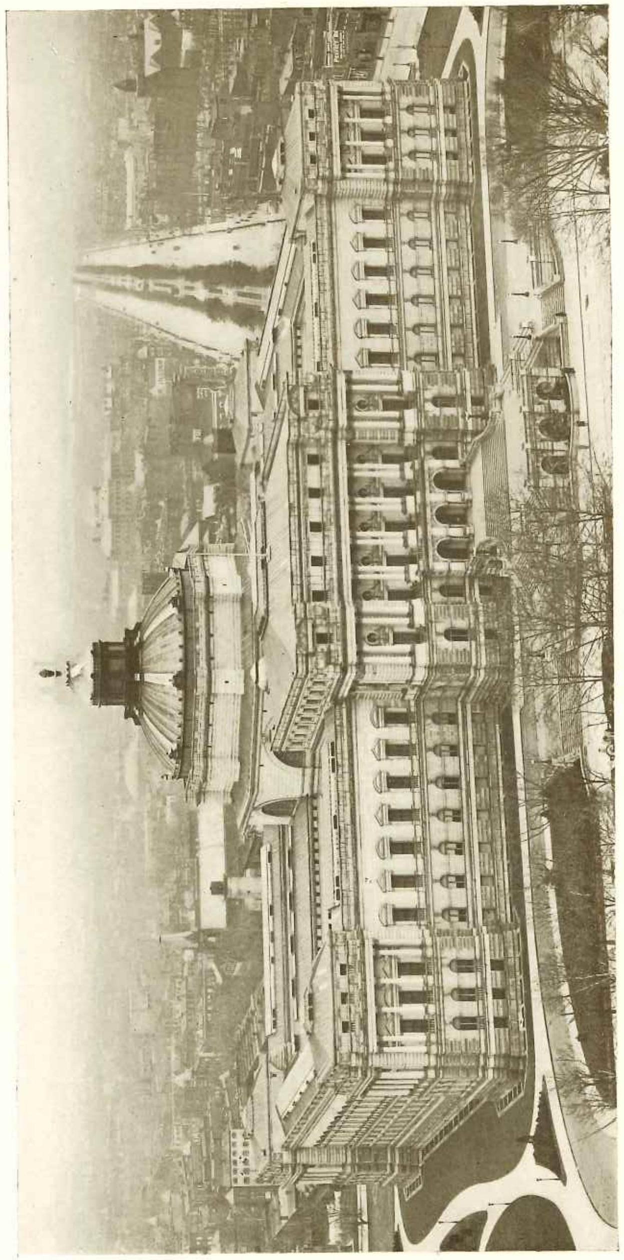
The claims are the vital element in the specification as prepared for you by your attorneys. The scope of your patent, the extent to which it protects your idea, is fixed forever by the claims as they are finally allowed by the Patent Office. If your attorney has been remiss or incompetent and has failed to obtain full protection for your actual invention by securing the broadest claims that the Patent Office may properly allow, you can never remedy his omission by any subsequent proceedings.

> "An applicant for patent in the United States is required by law not only to describe his invention fully, but to 'particularly point out and distinctly claim the part, improvement or combination which he claims as his invention or discovery,' and on the meaning given by the courts to the claims, the scope and validity of the patent depends. * * * It is not too much to say that no legal document needs to be drawn with greater skill than does the claim of a patent."
>
> Greeley on Foreign Patents, Sec. 97.

> "It is unnecessary to determine whether in view of the prior art the patentee could have made his claims broader, it is enough that he has not done so and that we are not permitted to rewrite them. We must take them as they are."
>
> U. S. Circuit Court of Appeals in Vole v. Cordley & Hayes.

> "Honest and skillful solicitors, with a thorough knowledge of the practice of the Office and patent law, and who are able to advise their clients as to the exact (legal) value of the patents which they can obtain for them, may be of much service to inventors. There are many such, but those who care for nothing but to give them something called a patent, that they may secure their own fee, have in too many instances proved a curse. To get rid of their client and of trouble, they have sometimes been content to take less than he is entitled to, while in many cases they have, with much self-laudation, presented him with the shadow when the substance was beyond his reach."
>
> Hon. S. S. Fisher, Commissioner's Report of 1869.

Commissioner Fisher's remarks are as true today as they were forty years ago.



THE LIBRARY OF CONGRESS

Selection of an Attorney

Next in importance to producing a valuable invention, an invention that fills a need, and working out its details to adapt it to fit into its proper place and do its proper work in its own department of industry is the selection of the attorney whose business it is to protect it by a patent. If the selection were always carefully made, the number of practicing attorneys would be a good deal smaller.

About thirty-five years ago an Ohio inventor produced a machine for pressing tobacco into plugs. The operation was rapid, the results uniform and the mechanism simple. It was a distinct advance in the art. With trifling changes in detail, the machine was extensively copied and used, without profit or redress to the inventor. The attorney employed to obtain the patent had failed to grasp the broad features of novelty shown in the mechanism, and had contented himself with a single specific, narrow claim, with the result that a change in a single element, without impairing the efficiency of the machine, avoided infringement. That was not the fault of the courts or of the law, but the fault of the inventor and his attorney. They could have protected the real invention, but failed to do so. A book many times the size of this could be filled with similar instances. Read the Randolph & Briscoe booklet, "Why Some Inventors Fail." Learn there how to read your own claims. If the claims in the application papers sent you for signature do not seem to you broad enough, ask why. Your attorneys, if they are competent and honest, have a good reason and will give it to you. We are always glad to answer such questions.

The Attorney and the Examiner

In the Patent Office the claims of the application are hammered into their final shape between the Primary Examiner and the attorney in charge of the application. It is the duty of the attorney to make and secure the broadest claims to which he thinks the inventor is entitled, and it is the duty of the Examiner to cite against the application or in limitation of its claims or of some of them, prior U. S. Patents, prior foreign patents and American and foreign publications; what is generally known as "the state of the art." The attitude of the Examiner is that of criticism and objection. This is proper, and is in the long run to the advantage of the applicant, for the more thoroughly and critically the case has been examined, the more thorough has been the Examiner's search against it, the more nearly certain it is that the resulting patent will stand unquestioned.

Effect of Employing the Wrong Attorney

Here is where many attorneys fail to get results. Getting good results means hard work. They have pocketed their fees and do not care to continue the struggle with the Patent Office. They would have their clients believe that a patent is a patent, whether properly protecting the invention or not (there is no greater mistake), and they accept the allowance of the narrower claims as granted by the Examiner, and abandon the broader ones that by argument, skill and persistency might still have been secured. In other instances the attorney is not sufficiently skillful to meet the Examiner's action, even if it is not altogether sound, with argument, or to so amend the claims in dispute as to get them allowed in their amended form.

We never accept allowance of a portion of the claims of an application without exhausting every effort to obtain all we believe our client entitled to. Every case entrusted to us is thoroughly prosecuted.

Allowance and Issue

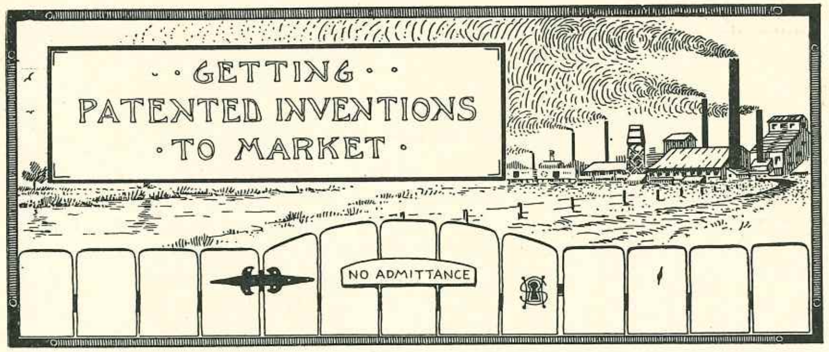
On notice to us of the allowance of your application we promptly advise you of our receipt thereof. You may, at any time within six months after allowance, pay the final Government fee, in which case the patent will issue in about four weeks following the receipt of the fee at the Patent Office. You can thus to a certain extent control the date of issue. If you have not already applied for foreign patents, it is well to withhold the United States patent from issue until you have decided in what foreign countries, if any, you desire to patent your invention and have had such foreign applications as you think advisable prepared for filing, as in most foreign countries you cannot obtain a valid patent after issue of a patent here for the same invention. Valuable foreign rights have been lost through oversight on this point. An exception to the above rule slightly extending, in some cases only, the time for filing foreign applications, is furnished by what is known as the International Convention, discussed elsewhere.

On issue the original patent is forwarded at once to your address.

CAVEATS ABOLISHED

Caveats have been abolished by Act of Congress. The only way to obtain official protection for an invention is to file an application for a patent. An unofficial, but effective, way to protect your idea before application is to send us a clear sketch and description and let us make a patentability search. In any controversy that may thereafter arise (for instance, in an interference proceeding) as to who was the first inventor, our records and the correspondence are evidence of the date on which you disclosed the invention to us in requesting the search. This evidence is practically conclusive on the point in question, and your rights are therefore protected to that extent from the date on which you mail us the sketch or model and description. This costs you nothing, and it is not wise to neglect it. If you disclose your invention to others, do so only to those whom you know and can trust, and, if possible, make a sketch, date it, and get them to sign it as witnesses. This will be useful if your application is placed by the Patent Office in interference with another and you consequently have to make good your date of invention.

The longer you delay filing your application the greater risk you run of an interference.



A few inventors need their inventions in their own business, and are prepared and equipped themselves to make full use of them. Their improvements give them an advantage in cost of production, utility, quality or appearance of goods in their own line of trade, and they prefer to keep this advantage for themselves. Or the inventor may have put his abilities at the service of a manufacturer under a contract. These require no assistance in placing their inventions and need nothing from the attorney but faithful and competent service in preparing and prosecuting their applications, which service we are well equipped to give them.

The vast majority must reach capital on some terms or other, whether they desire to sell outright, to obtain money to manufacture the patented device or article and put it on the market, or to place it on royalty. Frequently the inventor needs the ability of the trained business man, familiar with the line of manufacture in which the invention belongs, quite as much as he needs his capital. But the business man needs meritorious and useful inventions to enable him to meet competition and increase his profits. The inventor needs him, but he also needs the inventor.

> "The poor man today who gets a reasonably good invention has almost a certainty of getting a customer or a financial backer, because there is so much competition for good inventions."
>
> (From the testimony of Frederick P. Fish, formerly President of the American Bell Telephone Company, before the House Committee on Patents, March 2, 1910.)

All that is necessary in the case of inventions of merit is to get the inventor and business man together. This we are prepared to do.

We Advertise Your Patent

In the first place we advertise the patented invention in publications having several millions of circulation, absolutely without cost to the inventor. We are able to do this at a reduced figure. The advertising we give would cost the inventor himself more than our entire charges for preparing and prosecuting his case in the Patent Office. Such advertising, scattered well over the country, often brings inquiries from unexpected and frequently valuable quarters.

Our Lists of Possible Buyers

We have compiled classified lists, which we are constantly enlarging, of manufacturers and capitalists who are interested in different lines of invention and are therefore possible purchasers, licensees or backers. The value of one of these lists to a patentee who desires to sell or finance his patent is obvious. Sending a circular letter to a compact list of manufacturers, all of whom are interested in your general line of invention, costs but a trifle compared with any other plan of circularizing. Your circular letters in such case will be read, and, if your invention has merit and your description shows it, they will bring results. We prefer, for reasons which we state hereafter, to send these lists only on *allowance* of your application, though if you wish, contrary to our advice, to circularize at an earlier date, we will send the list if so requested.

Lists Sent Only to Clients

We will not under any circumstances send a list of possible buyers to any person whose application has not been filed through this office. We cannot pay any attention to such requests. We wish to help *all* inventors, whether they are our clients or not, and we trust that they will all alike find the information and suggestions given here of value to them, but to make exceptions to this rule would be unfair to those who entrust their business to us. This service is for our clients only. Other attorneys and agencies must look after their own.

Circulars Prepared on Request

If so requested, we will write for you a circular letter describing your invention and calling attention to its valuable features, especially to those likely to strike the prospective buyer, including a clear illustration, and will send copies to you in addressed envelopes, covering the whole list, ready for stamping and mailing. The list itself is sent free of any expense to you. Circular letters prepared by us cost from $5 up, according to the length of the list and the amount of matter in the letter itself. In any given case we can always tell you the exact cost in advance. In these cases you mail your own circulars and attend to the resulting correspondence yourself, although you can always have our advice, without charge, on any question that develops out of it, and you may refer any correspondent to us on any question regarding your patent.

These circulars are carefully prepared by a competent specialist, after a thorough study of the case. Their aim is to bring out both in the circular itself and in the illustration the strong and useful points of the invention, especially those that will appeal to the manufacturer and to the user. Including the cut and not including the value of the specialist's work, they would cost the inventor, if printed or multigraphed on the same paper and in the same attractive style, nearly or quite as much as we charge for them, the main object being to secure careful attention and perusal, requiring a circular that is attractive in statement and appearance. We ask no profit for this work, do not solicit it, and prefer that the inventor should do it himself, if he feels competent to make a good presentation of his patent, using the same list of possible customers that we would use, which, as stated, we send him free of charge.

Cuts of the Invention

We will, if requested, furnish a special cut from which the illustration can be printed, at a cost of $5, or the client can obtain copies of the patent, to be mailed with his own circulars, at the Government price of five cents each, by ordering direct from the Patent Office.

Personal Assistance in Placing Your Patent

We are widely in touch with manufacturers and others needing inventions throughout the country, evidence of which may be seen in the prize offers and inquiries for special inventions which we publish from time to time. We are known personally, through correspondence and by reputation, to many thousands of firms and individuals who need and are seeking inventions in various lines. In many cases, therefore, we can give you direct personal assistance in placing your invention. For this service we make no charge unless we place your invention on terms that are satisfactory to you and that you accept. In these matters trust nobody who asks a fee in advance for "listing the patent," "expenses," "forming a corporation" or on any other excuse or pretext whatever. A man, a firm or a company that can do you any good is satisfied with a reasonable fee paid when you get your money.

Advantages of Our System

Not every patent issued is readily salable. Some are for useless inventions, some do an old thing in a new, but not better, way, many have been so badly prepared and presented in the Patent Office that their value has been destroyed there, but in helping you to get your patent to market, who can best serve you? An attorney or firm of attorneys who do not bring you or undertake to bring you in contact with capital? A concern that pretends to sell patents, but is really organized to get advances from you for services which it renders, and intends to render—no service at all? Or an organization favorably known to thousands of the class that need inventions, that are seeking them, and that have the money to pay for them, and composed of men who have studied the problem, invented plans and systems for meeting it, and are specially equipped to do the work of bringing invention and capital together? That is what the Randolph & Briscoe service means to inventors.

Develop Your Invention Yourself as Far as Possible

In getting your idea ready for presentation to the capitalist or manufacturer always carry it yourself as far as you can. An application already filed, drawings and a clear description are always necessary. Samples of the article or composition, or of the product of the process, or, if the invention is a machine, a working model, will help you a great deal. The other man risks his money if he takes up your invention, and he must satisfy himself that it is or will be protected by a good patent, that it is not only theoretically operative, but practically so, and that it will get the results and get them economically. The idea is new to him, and he has got to be shown. The farther you have developed your invention, the more thoroughly you can demonstrate it, the more independent your position is and the better terms you can make. The demonstration of some inventions, the actual construction of the machine, is often too much for the inventor's means, but there are thousands more that with a little ingenuity and small expense he can put into practical shape. But if his invention shows distinct merit on its face and has been protected, it is not usually hard to get it taken up, even if the capitalist has to demonstrate it at his own expense, though in such a case he, of course, expects a larger interest than if the inventor had himself furnished a working demonstration of his idea.

Financing an Invention Before Application Practically Impossible

This is in most instances so difficult as to be practically impossible. We ourselves always refuse to attempt it and it is absolutely useless to ask us to do so. Nearly all business men, however much they may be impressed with the practical merits of an invention, will refuse to consider it before an application for a patent has been filed and has either been allowed or is in a condition where allowance is practically certain.

Also, we will not be responsible to the inventor for the disclosure of an invention that has not been protected, at least by an application. We are in touch with thousands of business men. Some of them we know deal honestly in these matters, we believe most of them do, and we hope this may be the case with all; but the fact remains that hundreds, if not thousands, of inventions on which applications have not been filed, submitted for examination and possible investment, are stolen every year. Such a thing has never happened through us, and we do not intend that it shall. We take no chances on this point, and make no exceptions, even when the inventor says he is willing to run the risk himself, as, even in that case, he would in his own mind hold us responsible. Do not ask us to disclose your invention, if it is not patented or at least in application, to anybody under any circumstances, unless the man is personally known to you, and the disclosure is to be made entirely on your own responsibility.

Money for experimental work, for the development and trial of the idea before application for a patent, can only be had from some person who knows the inventor personally and has confidence in him and in his ability to produce the desired result, and even then the inventor should have a favorable report to show, indicating clearly that a patent will probably be granted him. No one else will consider the proposition.

Good Patent Attorneys Do Not Speculate in Inventions

Attorneys who serve a large and widely distributed clientele interested in many different classes of invention have no right to interest themselves financially in any, even to the extent of taking a share in it for their fees. Such attorneys should have no property right, large or small, in any patent. It means frequent temptation to render prejudiced and biased opinions, to practice favoritism among clients, and to indulge in unfair treatment of applications that may conflict with the attorney's interest in some other invention. The only proper way is to keep clear of all such complication. Our clients rely upon us for careful and unprejudiced opinions and for faithful and competent attention to their business in the Patent Office and before the courts. Most of them, all those that reflect a little on the subject, would feel less confidence in us if we interested ourselves in inventions.

No one has ever persuaded us to accept any interest in any invention, for our fees or for any other consideration. We feel that we have no right to do so, and have fully explained our position in order to avoid useless correspondence on the subject.

Practically Inoperative Inventions Sometimes Pay

The manufacturer who examines an invention with a view to purchase or license on royalty is after results. If the machine or process is not practically operative and is not likely to save cost, by increased output or otherwise; if the article of manufacture is not likely to be more salable than others of the same general class; if the invention is not likely to increase his profits he usually does not want it at any price. Yet inventions which are not practically operative may in some instances come into demand and bring a good price because they contain, in spite of their imperfections, one or more valuable ideas and because these are well protected by broad claims. It is a common experience of active patent lawyers to find an effective and valuable invention, owned by some client, blocked by just such a claim in a patent covering an altogether inferior machine. That is the earlier inventor's opportunity, and often brings him a good profit on a single feature of an invention otherwise worthless. When this happens he can usually thank some competent attorney who has obtained for him from the Patent Office *all* he was entitled to. Such cases have occurred many times in the experience of the attorneys connected with Randolph & Briscoe, Inc. The writer of this article remembers two cases, one a bottling machine and the other a stamp cancelling machine, in which his clients went to considerable expense to hunt up the inventors, buying a license in one case and an interest in the other, in inventions that were absolutely worthless as practical machines, but which contained claims which their own far superior mechanism infringed. Each inventor got a good profit on a practically inoperative invention that could not have been sold but for certain claims, which incompetent attorneys would probably have failed to secure for him.

Such instances furnish another reason for employing only competent, skillful and persistent attorneys in all proceedings before the Patent Office.

PRIZE OFFERS

We publish from time to time many prize offers in fac-simile copies. The prizes are not large, not usually much more than the cost of obtaining a patent, sometimes less. Their value to inventors lies in the fact that they are offered by people who need special inventions. Every individual or firm offering a prize through us knows what he wants, and if he can find the invention that meets the conditions he states, is in the market for it. The prize is offered to stimulate invention. There is no obligation on the part of the inventor to sell or license. He is free to deal with any one he sees fit, but he has a purchaser ready if he produces the invention that is wanted and desires to deal with the giver of the prize.

These prizes are open to all the world, and are not limited to the clients of any particular firm of attorneys. Inventions will not be considered for prizes unless the United States patent has been applied for and the application has been allowed, and, as a rule, it is useless to submit an invention patented before the date of the letter offering the prize, as what has been done up to that time may be presumed to have been already considered and found insufficient. When applications for patents for any of the prize inventions have been made through us we will see that they are properly entered in the competition, that they are fully considered and that their merits are properly brought out, the decision, however, resting with the giver of the prize.

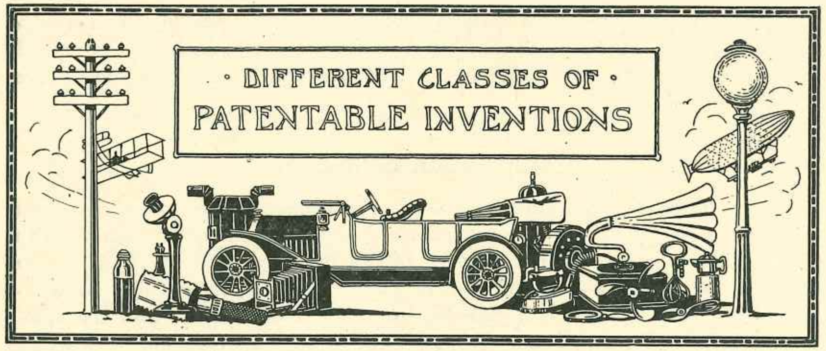
As the prizes are offered on the strength of our name and reputation, and in the belief that somewhere in our large clientage the man will be found to produce the invention needed, we naturally hope these various competitions will all be won by our clients, and are inclined to help them all we can without unfairness to other competitors.

We have now open a large number of these prize offers. They are, every one of them, for practical and feasible inventions. We shall receive and publish many more, as manufacturers, as they are now doing, come to look more and more to us to find the inventions they need. We will guarantee the payment of the prizes to inventors entitled to them. It is for our clients to make good with the inventions. Every prize means not only one but several possible purchasers, and a certain sale or license on royalty if the inventor and manufacturer can agree upon terms.

Nearly all the big prizes said to be offered for various inventions, like the prize for the non-refillable bottle, exist only in imagination or hearsay. We do not feel justified in advertising any prize offers except those that are sent directly to us over the signature of responsible concerns and that state a genuine need.

We frequently receive inquiries about Government prizes. The Government offers no prizes for any invention.

No prize is offered for Perpetual Motion.



A patent, under the law, may be granted for: (1) any new and useful process; (2) machine; (3) article of manufacture; (4) composition of matter; (5) any novel design.

If a patent has already been applied for in a foreign country for the same invention the application must be filed in the United States Patent Office within twelve months from the date of the foreign application.

The invention must not have been known or used before the applicant's invention or discovery thereof, or patented or described in any printed publication in this or any foreign country before his invention or discovery thereof or more than two years prior to the application and must not have been in public use or on sale in the United States for more than two years prior to the application.

Process

In requesting us to make a search on a process (termed "art" in the statute) state exactly the purpose or purposes of the process, the material, or substance used or operated upon, the successive steps of the process in their order, and, if machinery is used at any stage of the process, a description and sketch of it with its exact use and purpose.

Machine

In the case of a machine be sure that you show in your sketch or model the part or parts which alone or in combination comprise what you believe to be your invention, together with connecting parts, if any, and give a full description of the operation of the invention. It is always best to use letters of reference in your sketch or, when practicable, in your model, referring to your description. This helps to make it clear to us.

Article of Manufacture

In the case of an article of manufacture always send a sketch, a model or a sample of the article, together with a description referring by letters of reference if possible, and bringing out clearly every feature that you believe to be new.

Composition of Matter

In describing a composition of matter give all the ingredients in the exact proportions used; but if the proportions of any of them can be varied with substantially the same result be sure to tell us, if possible, to what extent this can be done. We should also be informed as to the manner of compounding them, especially if one ingredient, or more, is put into the compound at a different time. The purpose of the composition is also of importance.

Design

The sketch or model of a design should be in full detail, not omitting any distinctive feature. The article or articles formed into the shape of the design, or upon which it is stamped or moulded, should be named.

Of course, even when these simple directions are not followed, we do the best we can, but, as we will not attempt to make a search without fully understanding your idea, neglect of them may make it necessary for us to write for further information, which is annoying to you as well as ourselves and delays your business.

Process Patents. Value

If a process produces a distinctly new result, for instance, an improved product or a product of standard quality at a decreased cost, there is almost certain to be something patentably new in the process and the invention is probably entitled at the least to a fairly broad and valuable patent, but to obtain such a patent requires on the part of the attorney not only a thorough understanding of the invention, but particularly careful and intelligent work in the preparation and prosecution of the application. These cases, and many compositions of matter applications, appear simple, and it is frequently very easy to obtain allowances for them, but it is also very easy in such cases to fail to obtain allowance of the full and adequate claims which alone make the patent valuable.

Great Value of Many Process Patents

The values produced by this class of inventions are so large as to stagger imagination. It includes the Bell Telephone, the Bessemer open hearth and "basic" methods of making steel, scores of other widely used processes producing various kinds of steel and steel compounds, the processes that have reduced the price of aluminum from $1.00 a pound to twenty cents, the various photo-engraving processes, the use of carbide of calcium in making acetylene gas, nearly every one of the processes now used in the reduction, smelting and refining of metal ores, and thousands of others. Process inventions enter into practically every department of manufacturing industry, and where they produce results, as we believe the greater portion of them have done, they always can be made to pay, a good many of them in six and seven figures.

Machine Patents. Test of Value

The ultimate test of a new idea in machinery is the result obtained. It must be capable of producing something that is wanted or that can be shown to be desirable, increased convenience, increased safety, decreased cost somewhere, in the operation of the machine, in its durability, in the amount of its output, in saving of labor, in improved quality of product. It really comes down in most cases to a question of whether the use of the invention will pay the user. The telephone saves time, safety appliances prevent damage suits, the best adding machine now on the market, which sells at the rate of 20,000 machines a year at from $275 up, saves at least $1,000 a year in clerk hire for each machine in operation. When the improved machine is to be used in any line of manufacture it is always purely a question of cost and profit and nothing else. It is well to keep this always in mind. If your invention will stand this test you are likely to find it profitable. The majority of successful improvements in shop tools and machinery are workmen's inventions. The workman is familiar with the tools and machines used in his own industry and is in a position to see defects and work out effective improvements.

A patent will be granted for any new and useful part or attachment, for any new and useful change or modification in the form or function of any part, for any combination of a new part or element with old parts or elements, or for any new and useful combination of old parts or elements.

The purpose and result of a machine invention should be stated clearly in ordering a search on it and should appear in the application.

Articles of Manufacture. Opportunities

New articles of manufacture, such as collar buttons, clasps, hooks and eyes, tags, washers, fasteners, safety pins, bottle caps, farming tools, stove lifters and other kitchen utensils offer the best field for inventors who have had no special experience in any of the mechanic arts, and have paid millions in profits and royalties to observant men and women, showing that a mechanical training is by no means essential to highly successful and profitable invention.

Compositions of Matter—Value

Compositions of matter, such as dyes, paints, cleaning fluids, waterproof compounds and artificial building materials such as building blocks and roofing tiles have been the subjects of a great number of valuable patents.

Medical Compounds

Formerly many patents were granted for medical compounds as compositions of matter. The Patent Office is now, and has been for some time, opposed to the grant of patents for the whole class of so-called proprietary medicines, in which position it is strongly supported, of course, by the medical profession. The chance of obtaining a patent for a medical compound is very slight, and we should not agree to refund our fees in case of rejection. We usually suggest the advisability of trade-mark protection in such cases, if a striking and effective name or mark is selected that can be registered under the law. This does not require disclosure of the ingredients, which is an advantage, and it costs much less than a patent.

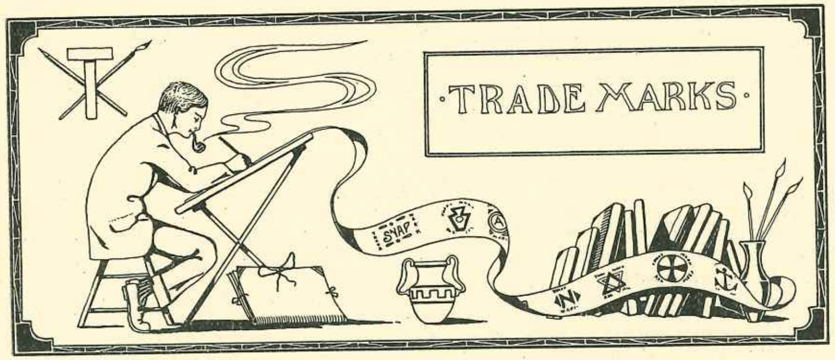
Design Patents

Design patents are granted for "any new, original and ornamental design for an article of manufacture" (Revised Statutes, 4929). This is held to cover any original shape or configuration of the article itself, and any original pattern, print or picture intended to be printed, painted, etched or moulded upon or in the goods or article; provided that the purpose of the design is clearly ornamental, the extent to which it actually is so being immaterial, that being a matter of taste and not of law. The law is broad and liberal and is liberally construed and applied in the Patent Office and by the courts.

A design patent can be secured for the pattern of a machine or article of manufacture, if ornamental, whether a mechanical patent is or ever can be obtained for it or not, and such a patent frequently affords a valuable additional protection to a mechanically patented device or article.

In many cases it is advisable for this reason to take out a patent for the design of an invention otherwise patentable; and if an unpatentable article is to be put on the market in a special form or with a special design stamped or moulded on it, and in considerable quantities, a design patent should always be obtained if possible. In some cases, especially when shape, form or some peculiarity of design is largely relied upon to sell the article, the design patent may be the best form of protection. More than one business success has been built on a design patent. Any imitation of a patented design that is sufficiently close to deceive an ordinary purchaser is an infringement of the patent. The imitation need not necessarily cover all details.

Design patents are granted for three and one-half, seven or fourteen years. A three and one-half or seven year patent cannot be extended. The applicant must make his choice at the outset. The inventor of a design should first consider whether he expects a continuous sale for the article, or whether he regards it as one of the class of novelties that have a large sale for a few years only, as he may apply for a patent for three and one-half years at $45, for one for seven years at $50, or for one for fourteen years at $65, these figures including both our fee and the Government fee, and cost of one sheet of drawings.



A trade-mark consists of a word, combination of words, emblem, device, symbol, picture, autograph, monogram, or any of these combined, placed on goods of a particular class or on packages containing them. Such a mark may be registered in the Patent Office under the Trade-Mark Act of 1905 and the amendments thereto, if it has never been used on the same class of goods by any person except the applicant and his business predecessors, and if it otherwise complies with the requirements of the Act. It must *not* be descriptive in any respect of the kind, quality, material or origin of the goods or the place or locality where they are made or from which they are distributed; in other words, the distinctive name used, if any, must be *arbitrary*. For instance, "Quick-Rise" for baking powder could not be registered, because "Quick-Rise" is descriptive of the supposed quality and action of the goods, whereas "Climax" for baking powder would be registrable, if new, because the name "Climax" is not descriptive but arbitrary.

Trade-Marks. Infringement

The Act, however, makes one exception to the rule denying registry to trade-marks that are in any way descriptive. If the proprietor or his business predecessors have had exclusive use of the mark (if he or he and they successively, have used it, and no one else), for ten years prior to February 20, 1905, the date of the Act, it may be admitted to registry even if descriptive.

The owner of a trade-mark has the sole right to use it on the class of goods for which it has been registered. Any person counterfeiting the mark, or so far imitating it as to deceive an ordinary purchaser, is an infringer and is liable to an injunction and a judgment for damages. The trade-mark identifies the goods and protects the reputation they have acquired or may acquire under the mark.

Trade-Marks. Date of First Use

The owner must have *used* the mark and should in his application give the date or approximate date when use was begun, which should always be the earliest date that can be proved, though a single day's use is sufficient to admit the mark to registry.

Trade-Mark Searches

A search should always be made to determine whether or not the same trade-mark has already been registered for the same class of goods. We make no charge for this service or for our opinion as to registrability of a trade-mark submitted to us for examination.

The Government fee is $10, payable on application. Our charge for preparing and prosecuting the application is $15, and the cost of the official drawing is $5.

Application for Registration. Directions

When you order us to prepare an application for registry of a trade-mark you should send us six specimens of the mark as used, the description of goods on which it is used, the full name of the owner, whether person, firm or corporation (if a corporation, the state in which it is incorporated), and the place of business of the owner, with street and number, if any. If the owner is a firm give us in addition to the firm name the names and residences of the individual members, and do not omit the date of first use of the mark. We can then prepare the papers and send them to you for signature without delay.

Trade-marks can be registered in most foreign countries in which they are of any value, at a cost somewhat higher than the cost of registry here.

Registration of Commercial Prints and Labels

COMMERCIAL PRINTS relate to advertising matter such as posters, calendars, cuts used in advertising, letter heads, and the like, used in commerce. LABELS are, as their name implies, printed on sheets of fabric, etc., to be applied to merchandise or to the packages containing it. PRINTS and LABELS are registered in the United States Patent Office, but are governed by the provisions of the copyright law hereinafter referred to.

In order to make a print or a label registrable, it must have been used by the applicant, that is published, with a notice reading "Copyright by ———," or if preferred a copyright notice may be abbreviated "Copr." with the name of the applicant, or may consist of the capital letter "C" surrounded by a circle, provided that the name of the applicant appears upon the label or print. This use of the label or print with the copyright notice entitles the applicant to registration and no registration can be secured unless such use is set up and the date on which the use first took place is stated in the application.

Furthermore, the label or print to be registrable must be artistic in nature, and this has been held to consist in preparation of the print or label by other process than simply printing with the type and other characters usually carried in stock by an up-to-date printer. Or in other words, a part, if not all of the label must be printed from a cut or plate.

The label or print must also include the name of the proprietor and the nature of the goods for which or on which it has been used and may also include words, names of places and devices that, because of their descriptive nature or for other reasons, would not be admitted to registration as a trade-mark.

The registration of a print or label, however, does not protect the registrant in the use of a part only of the label, such, for instance, as a trade-mark, but extends to the entire print or label as filed with the application, and should it be desired to protect a particular design or arbitrary word or symbol as a trade-mark, a trade-mark application should be filed in addition to an application for registration of the print or label.

The total cost of registering a print or label is $15, including the Government filing fee. To enable us to prepare the necessary application papers, we must be furnished with 11 copies of the print or label as previously used, together with the name of the proprietor of the right and the nature of the goods on which it has been used.

COPYRIGHTS

Copyright applies to works of art and literature, pictures, photographs, stationery, books, pamphlets, maps, plays, musical compositions and like classes of mental products not intended for purposes of physical utility.

Under the present law application for registration is made to the Register of Copyrights instead of the Librarian of Congress, as formerly. Subjects of copyright are divided into classes. There is a distinction in the form of application and conditions of registration between some of these and also between those reproduced for publication and those, for instance paintings, statues and some plays and musical publications, not intended to be so reproduced.

To entitle a proprietor of a production to copyright protection, he must first publish his production, that is, make it public by printing it or otherwise reproducing it, if capable of printing or reproduction, with a copyright notice similar to the copyright notice referred to above under the head of "Registration of Commercial Prints and Labels," except that the copyright notice consisting of the capital letter "C" surrounded by a circle should only be used upon works of art, pictures and photographs, and must be accompanied by the name of the proprietor of the copyright. Furthermore, the article to be copyrighted must have a title and for the purposes of registration we must be furnished with two complete copies of the production if it consists of a book, pamphlet, map, musical composition or printed play. If the article to be copyrighted is a photograph and that is to be reproduced for sale, two copies of the photograph must also be furnished, but if not to be reproduced by sale, but one copy would be sufficient. If the production consists of a work of art or a picture, that is not to be reproduced for sale then two photographic copies of the work of art or picture must be furnished to us to be filed with the application.

Our charge for this service is $5, which includes the fee for registration.

Assignments of Trade-Marks, Labels and Copyrights

Trade-marks, labels and copyrights, like patents, are assignable. Assignments should in every instance be recorded. Our charges for preparing and recording assignments of trade-marks and labels is $5 in each case. Assignments of copyrights cost $3 in each case, including record fee.

Assignments of Patents

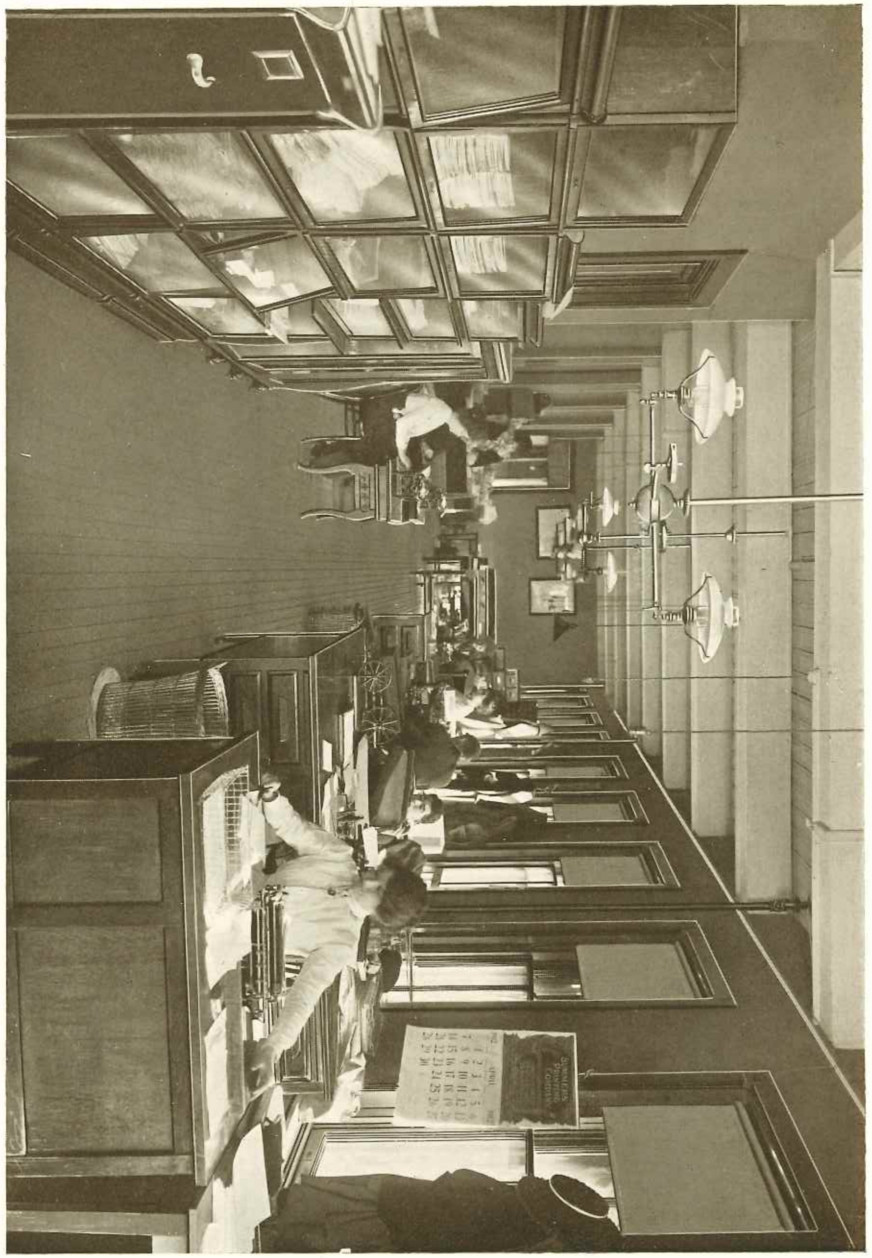
Assignments of Patents may be for the entire interest in the patent or for a certain undivided interest therein.

A patent is incapable of division (Walker, 287) except territorially. If a grant (a different thing from an assignment) is made by the inventor of all the right, title and interest for the State of New Jersey, the grantee becomes the owner of a territorial interest, and the patentee himself, if he made or sold the patented article in New Jersey without the permission of the grantee, would be an infringer.

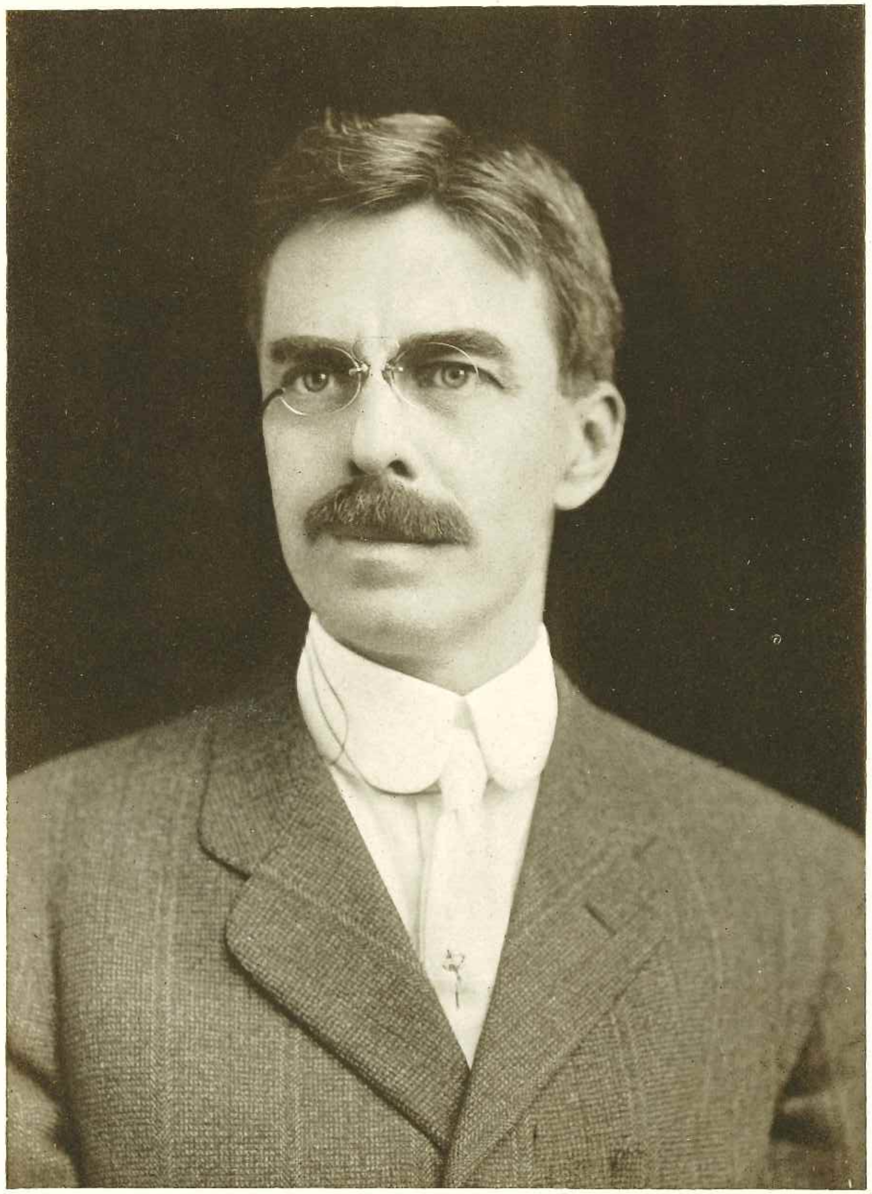
The owner of an undivided interest, large or small, in any patent, may manufacture, use and sell the patented article, and grant licenses (not exclusive) to others to manufacture, use and sell, to any extent he pleases, without asking the consent of the other owner or owners or accounting to him or to them for profits or royalties received. If it is regarded as desirable to prevent the possibility of such use of any fractional interest an agreement should be made in writing and signed by the part owners in which they respectively agree that no one of them shall assign or work his interest or grant any license without mutual consent. Such an agreement may be incorporated in the contract of assignment if desired. It adds a little to the cost of preparation and to the record fee. Our charge for preparing and recording a simple assignment is $5.

Assignment to Trustee

Where there exists an agreement between the assigner and the assignees of a patent prohibiting the assignment of an interest or any independent working of the invention, such an agreement does not affect the title, and its breach is generally answerable only in damages. It is because of this that in safeguarding the interest of our clients, who are not infrequently the purchasers of a patent, we often advise the assignment of the entire patent to one or more trustees for the purpose of holding the same for those in interest.



CORRESPONDENCE AND FILES DIVISION



MR. L. F. RANDOLPH, JR.
Attorney and Counsellor at Law
Vice-President and Managing Director

This preserves intact the patent monopoly and prevents any independent operations under the patent by those in interest. A trust assignment of this character must necessarily contain provisions under which the trustees are to operate, and because of this and of the need of great care in its preparation, a special charge must be made, dependent upon the amount of work and time required.

LICENSES UNDER PATENTS

Licenses may be exclusive, for the entire country or for certain territory, or non-exclusive, consisting in a general permission to make and use, or simply to use, the invention, or a permission to make or use under certain limitations. If it is confined to a certain plant or plants it is often called a shopright. A license, in short, may be just as broad or limited as the patentee and licensee may agree to make it, and may contain such special agreements and covenants as they may agree to have it contain.

Royalty Agreements

If the inventor places his patent on royalty instead of selling it (and the former is often the better way to handle the invention), the license is of great importance to him. It fixes his royalty, and prescribes the terms and conditions under which the licensee is to retain possession of his license, and usually settles many other points of importance, often of vital importance to the inventor. It should always contain, if practicable, a provision that if the royalties fail in any one year to amount to a certain agreed sum the license shall be forfeited, and others that a competent attorney to whom the patentee has fully stated the case can suggest.

We make a specialty of preparing licenses and all contracts relating to patents and of carefully protecting the interests of our clients therein. Our charges for this work are from $5 up, according to the amount of work involved. We make no charge to our own clients for consultation.

APPEALS IN PATENT OFFICE PROCEEDINGS

The Primary Examiner, though he has usually risen entirely by merit to high rank in a particularly competent service, is not infallible, as many successful appeals have proved. There are three higher tribunals to which successive appeals from a final rejection by the Primary Examiner can be taken—the Board of Examiners-in-Chief, the Commissioner of Patents and the Court of Appeals of the District of Columbia.

The Government fee for an appeal to the Board of Examiners-in-Chief is $10; for an appeal to the Commissioner, $20, and for an appeal to the Court, $15 docket fee and the cost of printing the record. Our own fees vary with the amount of labor involved. We can usually furnish an estimate on each case in advance.

We are exceedingly careful in advising an appeal, going thoroughly into the grounds for the Examiner's action, satisfying ourselves as to his errors and feeling strongly convinced that his action will be reversed, before we suggest appealing from his decision.

REISSUES

Only 197 patents were reissued during 1909. The sole object of a reissue is to remedy a defect. This defect must have arisen from "inadvertence, accident or mistake, and without fraudulent or deceptive intention." The patentee, as a preliminary step, must surrender his patent. A reissue, if granted, *does not extend the patent,* as some people insist on believing. It is granted, if at all, only for the unexpired term of the original patent. It is very difficult to broaden claims by reissue. To attempt this with any hope of success, application for the reissue must be made "within a reasonable time," which means at an early date. If the patentee attempts to cover with the claims of his reissue a device or article that has in the meantime been produced and does not infringe any of his former claims, the claims of his reissue will not be broadened. The Patent Office views such attempts with disfavor.

A reissue is sometimes justifiable, and even necessary, to correct bad work in the original application, and it is always well to send such cases to us for examination, but as a reissue involves some risk, and as there is usually little to be gained by it, we advise our clients in most such cases to let well enough alone.

The Government fee for a reissue is $30. Our own fee is usually $30 additional.

REJECTED APPLICATIONS

We are always willing to examine your rejected cases without charge. It is always possible that one competent attorney, looking at the case from a new and individual viewpoint, may obtain an allowance, when another attorney, even a competent and skillful one, has failed. We never drop a difficult case merely because one of the attorneys on our staff cannot meet the Examiner's action or convert him to his views. We give it to another. If you wish us to look up a rejected case for you, write us, giving, if possible, the serial number, the title of the case and the date of filing, and we will send you a power to sign and return to us, which will give us access to the application. Then we can properly advise you whether to proceed with the case, taking it up if abandoned or forfeited, or drop it. There is no charge for reviewing the case or for advice. If a year has not elapsed since the last action of the Primary Examiner, our fee for taking up and prosecuting the case, which we never do unless the prospects of an ultimate allowance justify us in doing so, is usually $25, sometimes less, depending upon the character and condition of the case.

ABANDONED APPLICATIONS

An application is constructively *abandoned* if a year has elapsed since the action of the Primary Examiner, without reply by the applicant or his attorney. Such a case requires a new application throughout, including both specification and drawings. If the invention has been in use for more than two years prior to the new application the inventor is not entitled to a patent. Otherwise, if the invention is new and patentable, he is.

FORFEITED APPLICATIONS

An application is *forfeited* if the final Government fee is not paid within six months after allowance. A forfeited application can be renewed, if desired by the applicant, by payment of a second application fee of $15. It is held to be a renewal and continuance of the original application, and the two-year rule which applies in an abandoned application does not apply in a forfeited application. Such a forfeited application may be renewed, *once only.* Government fees are in such cases, however, exactly the same as in a new application. Our own charges vary, with the amount of work required, from $20 to $35.

INTERFERENCES

The object of an interference proceeding is to determine the question of priority of invention. There may be two or more parties. One or more of the claims of the applications may be in interference. An inventor who has an application pending may have his application placed in interference with an issued patent if he can produce *prima facie* evidence that he made his invention before the date of the patentee's application. Between pending applications the interference is declared by the Patent Office, the parties having, of course, no previous official knowledge of one another's applications. Notice is given to each applicant to file a "preliminary statement" as to the date of his invention. Upon the filing of these statements time is given for the taking of proofs by each applicant as to the date of his invention, and opposing applicants may appear and cross-examine. The burden of proof is on the later (junior) applicant; and the earlier (senior) applicant, the one whose application bears the earliest date, frequently escapes the necessity of taking any proofs at all, through default of the other applicant or applicants. He is not obliged to submit proofs unless a junior applicant has done so, and his proofs are last in order. Date of conception in these cases is not necessarily sufficient to overcome the senior applicant's contention. Due diligence must be shown in reduction to practice.

The case is heard by the Examiner of Interferences on the proofs submitted and the arguments of counsel, and judgment as to priority is rendered in favor of the applicant who appears to have made the invention first, and to have shown due diligence in reducing it to practice. An appeal may be taken to the Board of Examiners-in-Chief, from the Board to the Commissioner and from the Commissioner to the Court of Appeals, except in trade-mark cases, in which the appeal is taken directly to the Commissioner.

TRADE-MARKS. OPPOSITION AND INTERFERENCE

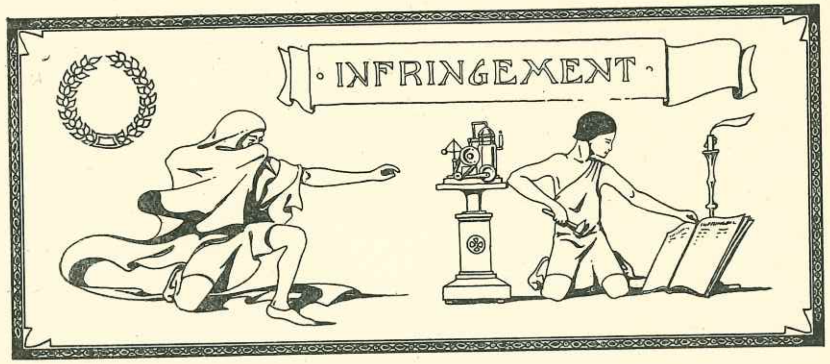
A trade-mark, if found on examination to be registrable, is passed for publication and published in the Patent Office Gazette. "Any person who believes he would be damaged by registration of the mark may oppose the same by filing notice of opposition, stating the grounds therefor, in the Patent Office within thirty days after the publication of the mark sought to be registered" (Trade-Mark Act of February 20, 1905). If opposition is made and the grounds alleged for it are legal and not frivolous or insufficient, an interference is declared and a proceeding takes place before the Examiner of Interferences that is similar in most respects to a patent interference, to determine whether or not a trade-mark certificate shall issue to the applicant.

We can give a close estimate of our charges in a patent or trade-mark interference when we are thoroughly familiar with the case, and know the names and location of the witnesses and the nature of their probable testimony, but not without these, as the cost of such proceedings varies widely. Charges are necessarily in proportion to the amount of work involved, but are always moderate.

Nearly every invention contains the possibility, and a great portion of them the probability, if well handled, of a large return to the originator. The risk under our liberal system is very little in proportion to the chance of profit, and our plan of putting the inventor in direct touch with the business man increases his possibilities of profit many times over.

To interest in your invention persons who know you, you should first be in a position to show that you will in all probability get a patent and that they will be justified in assisting you to that end. Our favorable report as to patentability accompanied by our refund certificate is the best and most convincing assurance that a patent can be obtained.

No business can be done by merely stating that your invention will produce certain results. An inventor who refuses to disclose his invention unless money is put up first is a man nobody will bother with. First protect and then disclose. Then people will talk business with you.



Whoever, without license or permission of the owner, practices a patented process, or makes, uses or sells a patented machine, article of manufacture, composition of matter, or an article bearing a patented design, infringes the patent; and it is immaterial whether he appropriates the entire construction set forth in the patentee's specification or only a part of it providing the construction he uses conforms to one or more of the claims of the patent; in either case he is an infringer, is liable in damages, and may be enjoined by the court from continuing his infringement.

The Patent Office has nothing whatever to do with infringement. The remedy for it must be sought by an infringement suit in the Circuit Court of the United States for the District in which the defendant lives or is found. No other court, State or Federal, has any jurisdiction in infringement cases, except in appeals. With the numerous technical points that arise in every infringement suit, experienced inventors and manufacturers invariably place such cases in the hands of properly qualified attorneys familiar with patents and patent law. Without high technical skill and training on the part of the attorney, even in the simplest cases, the patentee is badly handicapped. Members of the bar, who are themselves competent general practitioners, recognize this fully and never undertake an infringement suit without the assistance of trained patent counsel. With our long personal experience in infringement work we pay special attention to this branch of our practice. Our charges are as low as is consistent with the best service, and must necessarily depend on the nature of the individual case.

INFRINGEMENT AND VALIDITY SEARCHES

No man should, if he can avoid it by any reasonable settlement, defend an infringement suit, and he should *never* begin one—without having an exhaustive search made through all American and foreign patents in any way bearing upon his patent, or upon his opponent's patent if suit has been brought against him. As a good patentability search means over 90 per cent of allowances on favorable reports, we take the small chance of a rejection and risk our fees. But as an infringement suit is, at best, expensive, *certainties* must be aimed at. The defendant must *know* whether to settle or fight, the patentee must *know* that he has a strong case. We cannot give a safe opinion in such cases without an infringement search.

Before purchasing a patent, if the price paid is at all large, a careful purchaser will always order a validity search and get the opinion of good patent counsel. Either search is on substantially the same basis as the other.

Infringement and validity searches vary greatly in cost. If the "art" is new, and the number of patents in the class is small, an exhaustive search may be made in two days. Otherwise it requires a longer time.

In this line of work the conditions of cases differ, and the character and extent of the investigation required in each case differs accordingly. It is difficult in most cases to estimate the exact cost, though a general idea of it can frequently be given. Where no estimate can be furnished, a minimum charge of $25 for each day required by the search is made.

In this connection we may state positively that this work is never entrusted to any one but our Mr. Randolph or one of his associate patent lawyers, and that reports upon these searches will be countersigned by the patent attorneys making them. Much depends on the absolute accuracy of this very important work, and our reports as to validity and infringement are entitled to the full confidence of our clients.

TITLE SEARCHES

For the purpose of protecting the public, including purchasers, licensees and litigants, the statutes provide for the recording in the Patent Office of all instruments which affect the title to patents, and it is always important for the prospective purchaser of a patent that an examination should be made of the records to determine whether or not the title to the patent is in the person or persons who intend transferring it to him.

A search and report as to title, though in the majority of cases a simple matter, may at any time require a high order of legal ability on the part of the attorney in the construction of instruments found on record which are of a more or less complex character. Painstaking care in making the examination and a thorough knowledge of the Assignment Division of the Patent Office is a prerequisite in all cases.

Title searches and reports are among the distinctive features of the Randolph & Briscoe service. Such searches are made by a highly competent examining force, instead of being entrusted to mere solicitors of patents who are not patent lawyers, and reports are written, not only by patent lawyers, but by lawyers thoroughly versed in the law of patent contracts and titles generally. We guarantee our work in every department, and accordingly follow the practice of real estate title companies in giving with every report an indemnity agreement against any loss arising from failure on our part to report a patent title correctly.

The minimum charge for running down a patent title is $5. Where, however, the record shows many or complicated transfers requiring more than usual work, our charge will be commensurate with the time and labor involved. In most cases the cost can be estimated in advance.

CHARGES IN SIMPLE CASES

For a Mechanical Patent—

Total Attorneys' Fee	$30.00
One Sheet of Drawings	5.00
First Government Fee	15.00
Final Government Fee	20.00
	$70.00

For a Process Patent that does not require drawings, or a Patent for Composition of Matter—

Total Attorneys' Fee	$30.00
First Government Fee	15.00
Final Government Fee	20.00
	$65.00

For a Design Patent, including Government Fee—

3½ years	$45.00
7 "	50.00
15 "	65.00

For Registration of a Trade-Mark—

Total Attorneys' Fee	$15.00
Government Fee	10.00
One Sheet of Drawings	5.00
	$30.00

For Registration of a Label, including Government Fee	15.00
For a Copyright, including Government Fee	5.00
For an Assignment of a Patent, Trade-Mark or Label, including Record Fee	5.00

N. B.—See page 15 for full information regarding the payment of our fees.

THE TIME REQUIRED TO SECURE A PATENT

There are 43 examining divisions in the Patent Office, each dealing with a different class, or group of classes, of inventions. This does not include the Division of Trade-Marks and Designs.

According to the *Official Gazette* of May 14, 1912, division 40 of the Patent Office, having charge of baggage, bottles and jars, check controlled apparatus and receptacles of various kinds, had completed its examination of new cases filed up to April 15, 1912, while division 26, having charge of "electricity, generation; motive power" had completed its examination only up to January 2, 1912. Division 40 was therefore only 27 days behind with its examination, while division 26 was 131 days behind. Other divisions had completed their examinations up to various points between these two divisions. At times a few divisions have been nearly, and on rare occasions completely, up to date, and others have been sometimes six months or more behind. In view of these facts it is useless to ask your attorney, "How long does it take to get a patent?" especially if he is not informed as to the invention for which the patent is sought and therefore does not know to what examining division the application will probably be assigned.

Usually, in order to get the best results, the best and broadest patent, the case must go before the Primary Examiner at least twice, which means a further delay of not less than from one to three months, according to the examining division that has the case. *No case is ever taken up out of its regular order,* except at the request of another department of the Government. This privilege is only used by the War and Navy Departments, in the case of military and naval inventions, and very rarely.

Patent Office Always Impartial

There is no such thing as a "pull" with the Patent Office. No registered attorney has any privileges that are not accorded every other. The only possible way to hasten allowance of good patents is by answering promptly and intelligently the actions of the Patent Office. This our office is specially organized and equipped to do. Allowances can be and frequently are secured on the first action of the Patent Office, but, except in very clear and simple cases, these are usually obtained by sacrificing valuable claims that might be secured by argument or amendment. That is not the way to get a good patent, though we can, of course, handle cases in that way if so specially instructed. But it will be against our advice.

"Quick" Allowances

Attorneys who advertise "quick" allowances can do no more than wait till the first action of the Patent Office and then take what it offers, often to the loss of their clients. The statements of such attorneys that they have obtained allowances in five days or in ten days may in some instances be true, but if so, it is only because the division to which the case was assigned

was at the time close up with its work. It has occurred that an allowance was secured *the next day* after filing the application. It was no special credit to the attorney, however, except for preparing a clear specification that did not have to be corrected or otherwise altered after filing. The remarkably prompt allowance resulted from the circumstance that the case was a very simple one and that the division to which it was assigned was up to the date of filing and looking for more work. Under those conditions an allowance in twenty-four hours was unusual but not extraordinary. To cite such cases, however correctly, in the effort to make people believe that a certain attorney has any special ability, influence or facilities for getting "quick" allowances is pure humbug.

Advantage of Employing Washington Attorneys

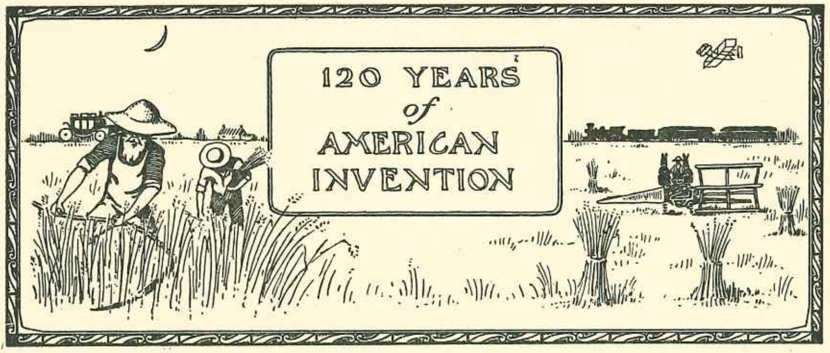
If, however, the attorney is located in Washington where, as any attorney may do, he can go over the case personally with the examiner, explaining his reasons and answering objections, and if he answers the Patent Office actions promptly and, as he can do if on the ground, without the delay of correspondence, he can legitimately save a good deal of time.

In this respect a competent Washington attorney has a distinct advantage. This is recognized by the large patent law firms outside of Washington, and many of them conduct business with the Patent Office through Washington attorneys. We have at the present time a number of cases before the Patent Office in which we are retained by out-of-town attorneys.

Order your application as soon as possible after receiving a favorable report. Delay in protecting a patentable invention means daily increasing risk. Others are always at work on the problems worth solving. Interference proceedings are expensive when they occur.

See what is needed outside your special line as well as within it. Inventive ideas of great value often come to men with little special experience, who keep on the alert to discover needs and deficiencies.

If we find your invention patentable we will issue our certificate guaranteeing refund of our fees for services if your application is rejected on any prior United States patent.



The number of patents issued by the United States Patent Office for the year 1911, including designs, was 34,240. The number of allowances for each year is considerably larger, being apparently fully 70 per cent of the applications, which in 1910 were 63,293, exclusive of applications for design which numbered 1,155 and 181 applications for reissues. A varying but always a considerable percentage of allowed applications are forfeited for non-payment of the final Government fee of $20.

In 1910, Great Britain issued 11,192 patents; Germany issued 12,478 patents, and France, 15,820 patents. The United States in 1910 issued 894 patents to the subjects of the King of Great Britain, 1,083 patents to the subjects of the Emperor of Germany, and 315 patents to citizens of France, a far greater number being issued by each of these countries to citizens of the United States. This country is the home of invention. Its inventors have contributed far more in the last 120 years to the progress of the useful arts than all Europe in the same period of time. It is the richest country in the world, and statisticians estimate that more than two-thirds of its wealth is due to invention. Nine thousand, nine hundred and fifty-seven patents were issued up to 1836. From July, 1836, to January, 1891, American inventors produced nearly all the 43,987 inventions patented in the United States, the number of those produced by foreign inventors and patented in this country being insignificant. In the twenty years since the close of 1890 the number of American patents has doubled. The last United States mechanical patent issued in 1911 is numbered 1,013,094, a record not only of great achievement but of great profit to American inventors.

The last thirty years have seen the development of many new industries, probably more than the previous century. The telephone and typewriter were invented in the '70's, but as developed industries they are only thirty years old. The same is true of the cash register, of the rise and decline of the bicycle industry, which was immensely profitable to inventors while it lasted, of the several inventions which made instantaneous and dry plate photography possible and brought them to perfection, of gas and gasoline engines, of the graphophone. The first electric street railway was put into operation in 1883. Photo-engraving processes, the commercial production of aluminum, the linotype machine, the adding machines, and the enormous automobile industry are less than twenty years old, and the same twenty years has seen the development of several hundred other new, useful and profitable industries.

The amount received from inventors in application, reissue and final fees by the United States Patent Office from 1836 to 1911 amounts to nearly $36,000,000. The Bell Telephone has paid more than that in dividends. Automobile and gasoline engine inventors alone have received more than that in royalties and sales of patents.

The next thirty years are likely to see the solution of many problems and to develop many inventions as great and radical as those now in use, together with thousands of minor but highly profitable improvements in various departments of industry and in the conveniences of life. There is no reason to believe that the improvements of the last quarter century will not be equalled or excelled in the next.

PROFITABLE INVENTIONS

Up to the present writing there have been issued by the Patent Office 14,075 patents in the class of harvesting machinery, 11,782 in printing presses, 5,245 in fire-arms, 8,768 in sewing machines, 4,559 in telegraphy, and a proportionately large number in the 232 other classes into which the Office divides inventions. At first sight this may seem discouraging, especially if the inventor finds that in the single sub-class to which his invention belongs there are perhaps a thousand prior patents. This discouraging impression is, if anything, increased rather than relieved by advertisers who are forever harping on the great returns received by Howe, Singer, Bessemer, Bell and Edison from radically new, broad and basic inventions. The inventor is tempted to say, "The big inventions are all made (which is not true by any means), and thousands of inventive minds have long been busy in every useful art, producing (including foreign inventions) three-quarters of a million patented inventions in twenty years. What is there left for me?"

Invention Calls for Further Invention

This view of the matter is wholly superficial and wholly wrong. Genuine invention not only results in improved methods, machines and products, but raises new standards of efficiency and economy, creating new demands and new markets. The inventor of today, as well as the public, is indebted to his predecessors, not only for instruction but for opportunity. Every great invention opens the door to hundreds of others which supplement it and make it more useful and effective. Of what use would Edison's invention of multiplex telegraphy, enabling the sending of many messages both ways at the same time over a single wire, have been to himself or the world, if the previous work of Morse and his successors in the field had not brought telegraphy into public use and created a demand for the very improvement that Edison, then a telegraph operator, invented?

Gas Engines and Automobiles

There are 4,466 United States patents for explosive engines operated by the expansion, against a piston, of spark ignited gas or gasoline vapor, mixed with air, or the same mixture ignited by flame or an incandescent tube. The earlier explosive engines, all of which embodied the main idea, by no means closed the door of opportunity to the inventor. They opened it wider. They created a demand for improved carburetters, cooling apparatus, sparking devices, later on for mufflers for the exhaust, and for improvements in every working part. These in their turn called forth the countless inventions that, combined with the gasoline engine, made the automobile a practical machine, created a colossal industry and enriched a regiment of inventors. The people of the United States are spending $400,000,000 a year for automobiles. Practically every part of every one of these is the product of invention. The profits of the inventors of the explosive engine were but a drop in the bucket compared with those of the automobile inventors who came after them, but the earlier group of inventions made the later group possible and gave them their enormous money value. What is true in one art, in one line of invention, is true in many others.

Growth of Invention in the United States

The last patent issued in 1860 was numbered 31,004. The present numbers run from July 28, 1836. The number that had been issued up to 1836 was 9,957 (not numbered in the present series) making the total number to the close of 1860, 40,961. Fifty years ago the population of the United States was less than two-fifths of its present number. Means of transportation and communication were limited and slow. Wants were few. The inventor not only had to produce his invention, but to educate the public to use it. There was no widespread demand. As late as 1877, even after it had been demonstrated, the telephone was received with indifference and regarded as a clever scientific toy, of no practical use. Professor Bell failed completely at first, to interest capital in it, and is said to have become so discouraged that he offered a half interest for $1,000. There had been no inventions leading up to the telephone and creating a demand for it. The public needed it badly, but was not conscious of its need. But a group of wise men recognized its great utility, supplied needed capital, and made large and rapid fortunes for themselves and for the inventor.

New Industries and New Demands

In fifty years hundreds of wholly new lines of industry, each with its own new demands and opportunities, have been opened by invention. The people have been educated to a higher standard of living and to a thousand new needs, all of which either have been or must be met by invention. A European peasant, six months in this country, uses ten times as many patented inventions as the millionaire of 1860. His clothing, heat, light, much of his food, his household conveniences, his transportation, all pay or have paid tribute to inventive genius. And the higher the scale of living the larger the demand for improved devices and for articles for personal and domestic use and the larger the tribute. This is returned many times over in economy of time, increased convenience and decreased cost. In manufacturing, mining and transportation the needs of industry and the returns to the inventor are even greater.

Broader Market for Inventions

Inventions and the claims secured for them are almost necessarily less broad in any given art now than when the same art was young, but this is more than compensated for by multiplied needs and an incalculably broader and quicker market for any invention, even a narrow one, that is adapted to conditions and offers an actual improvement. Such inventions, once protected and brought to the notice of the right class of manufacturers, do not go begging for recognition. That is where we can serve you.

Successful Minor Inventions

Too much has been said about the financial success of a few of the great inventions and too little about the legion of inventors whose names are unknown to fame, but who have built fortunes for themselves and others out of their brains and who have really made the earlier and broader inventions practically useful. There is not a live manufacturing town in the East or Middle West that has not among its prosperous citizens men who owe their prosperity, and often wealth, to their inventive ability, and others who have made fortunes out of patents they have acquired. These men are usually not widely known. Their very names are unheard of outside the limits of some one of the minor departments of industry, and yet they have brought to that something that has meant improvement in the industry and wealth to themselves—many thousands of them since the origin of the American patent system, many of them this very year. The great inventive minds, a small group of them in a century, that unlock for the world with basic inventions the deep secrets of nature, deserve, and have usually received, a great reward, but their inventions must be improved and developed in detail, each great man's idea by an army of subsequent inventors, before it can reach its full usefulness, and many of these latter have been paid for their work in six figures and some of them more.

Technical Training Not Essential to Successful Invention

Every intelligent American has it in him to conceive an invention that has commercial merit and can be made to produce a commercial profit. Perhaps the best line for the inventor without mechanical training is that of articles of manufacture for the household, the office, the store and the farm. To these may be added sporting goods and toys, and articles for the toilet and dressing table. The number of successful inventions in these lines is legion. Hundreds of manufacturers stand ready to snap up various inventions of this general class that show merit; all that has to be done is to convince them; and they are willing to be convinced.

Instances of Profitable Invention

The process which produces "Harveyized" steel, enormously increasing the resistance of modern armor plate, was the invention of Hayward A. Harvey. It was widely adopted and proved highly profitable. But the gimlet pointed screw, which was the invention of the same man, has undoubtedly paid still better. The first was the result of continued thought, study and costly experiment, the second and earlier invention was a flash of inventive insight which might have come to any one familiar with the defects of the screw then in use.

Safety razors have in the last few years cut the prices and sales of the old style razor in two and driven thousands of barbers into other business. The sales of one (high-priced) safety razor have gone far beyond a million. Other patented razors have a very large sale. Now we cannot tell you what these gentlemen are making; neither can we nor anybody else that is willing to talk, tell you just what anybody else makes or has made out of patents, except as an inventor's estate occasionally comes to light. Wise people who make money do not generally brag about it. But we can say, without fear of contradiction, that the safety razor people are making a tremendous lot.

Several makers of fountain pens have made large fortunes. It is said that the old stylographic pen realized $200,000 to $300,000 for the inventor.

The ball and socket glove fastener has probably passed the million mark in profit.

Did you ever realize what the perfection of metal stamping and drop forging has done for inventors of metallic specialties like the glove fastener? Inventors owe an inextinguishable debt to the genius of the men who developed these arts. Without them the cost of the greater portion of the metallic specialties now in use would be prohibitive, and invention would lose what is perhaps its most profitable market instead of realizing millions every year in this one field. Few of the pioneers in metal stamping ever patented their inventions, and the very names of the principal inventors are lost.

The first effective and practically useful "offset" guard for eye glasses was invented by Ivan Fox, of Philadelphia, in the early eighties. Previous to that time the guard was made in line with the lenses and was carried in a flat case. For two years he had difficulty in getting the trade to take it up. Then his offset guards were rapidly adopted wherever eyeglasses were used and brought him a well-earned fortune, said to be a very large one. Since the Fox patent expired other optical firms have made large profits on later inventions in the same line. The newest of them, the "Shur-on," is having a tremendous success. The "Lasso" guard, a Fox improvement on the original Fox guard, has a wide sale.

The hook which replaced the eyelet in laced shoes for men made enormous fortunes for the purchasers of the patent, being adopted on royalty, as soon as it became known, in every shoe factory in the country. It has never been successfully used on women's shoes, because it wears the inside edge and lower part of the lining in the front of the skirt, and no practical substitute for the eyelet has been found, but in men's shoes the profits had run into the millions before the patents expired.

In the bottling industry scores of improvements have made their inventors wealthy men. At first all effervescing beverages and those likely to ferment in the bottle were corked, with the cork secured by wire. Machines were invented to shape the wires so they could be twisted on with a single motion, other machines, going a step farther, both shaped and applied the wires. Many of these made large profits, and some are still in use in establishments that retain, for various reasons, the old system. The next development was the rubber stopper for beer and non-alcoholic drinks, with a hinge and lever fastening of stiff wire, adapted to be re-used until worn out or rotted. This was a bonanza to the original inventor and to others who made further improvements. No one knows the total royalties paid by these inventions; but no man who is posted on the bottling industry reckons them as low as a million, because they were undoubtedly several times that figure. Cork and rubber increased in price, and are still increasing year by year. Then came the bottle cap and seal, a metal cap containing a thin layer of cork and paraffined paper, affixed in an instant and hermetically sealing the bottle, at a mere fraction of the cost of a cork or rubber stopper. We do not know just what the owners are making, any more than we know what Mr. Gillette is making out of his razor; but we do know that they have every brewery and bottling establishment in the United States under tribute. The widow of the patentee is said to be in receipt of the largest income enjoyed by any woman in Maryland.

Spring clips for filing documents were a very profitable invention. The principal patent has long since expired. There are a number of fasteners for papers that pay exceedingly well, being used in enormous quantities. Simple and inexpensive office appliances that offer economy or actual convenience are always in active demand. Such things have been immensely profitable to inventors, particularly in the last twenty years.

Toys are apt to be profitable inventions. It is always a matter of uncertainty to what extent they will take with the public, but, if attractive, they will sell well enough to justify a patent and pay a good profit, and may, as such things have often done, make a very quick and very large return to the inventor. Games and puzzles, to be successful, must be simple and cheap in construction, and must require some headwork on the part of the player. It is practically impossible to get an expensive and elaborate new game or puzzle taken up by a manufacturer or dealer. The old "Fifteen" puzzle and "Pigs in Clover" are excellent examples. The sales of each of these are said to have been over a million. If patented (which neither of them was) each would have realized a competence for its inventor.

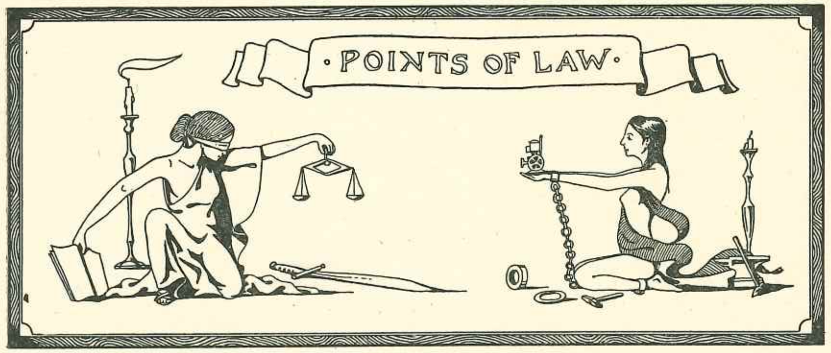
The De Long hook and eye was one of the most profitable small inventions on record. The idea was simplicity itself. Anybody might have invented it. The old hook and eye disengaged on pressure in the opposite direction, opening the placket hole or front. The invention simply interposed the "hump," which effectually prevented this. Every woman in the land had to have them. The invention was worth a fortune the day it was patented.

The opportunities in specialties, articles of manufacture, are all about every man who is observant, thinks and keeps his eyes open. The deficiency he sees and for which he invents a remedy may easily bring him many times more than a lifetime of toil and saving could do, because the want that he feels and that his invention meets, the want which stimulated him to make it, is the want of millions more.

Patents Pay, But Should Pay More

Patents promote industry and pay the capitalist. Do they pay the inventor? They have paid the inventors of this country hundreds of millions and would pay them hundreds of millions more if they all took good counsel and looked intelligently after their own interests. Many of them delay patenting good inventions till it is too late. Many more execute assignments, licenses and contracts without a full understanding of them. Many overstay their market, holding out for a higher price than they can realize. If the inventor is without means to operate his invention it may pay him to take less than it is really worth, for the sake of a quick sale, in order to equip himself to bring out other and more valuable ideas. Edison sold his multiplex telegraphy for $30,000. He should have got, probably could have got, a great deal more. But he was a telegraph operator on a small salary and without money, and with a brain teeming with great inventions which he could not even perfect for lack of means. This $30,000, less than had been paid the inventor of the glass insulator for telegraph poles, enabled him to carry out what he regarded as larger ideas. It was a bad trade, but we do not think Edison was ever sorry for it. Some inventors fail through lack of knowledge and opportunity to get their patents before people who would gladly look into them if offered the opportunity. In thousands of cases inventive skill needs to be supplemented by business knowledge and experience to get the best results. In all cases, especially as to the signing of papers, our clients will do well to consult us. We never, under any circumstances, put a valuation on a patent, but to the consideration of the above points, and many others, we can bring a long, and, we believe, honorable and successful experience and close and capable study of our clients' needs, and can extend to them practical advice and help. It is our business, not only to obtain for them full protection for their inventions, but to aid them to place them safely and to their advantage, and especially to enable them to avoid the mistakes which arise from careless or unbusiness-like contracts.

There is no department of human endeavor in which so much can be attained, practically without capital, as through invention, no other in which the millionaire and the workman stand on the same level. The market for what it produces is broader and its rewards more generous than ever before in its history.



Every inventor should read these points of law and familiarize himself with them. Answering, as they do, many of the questions asked us by inventors, in clear and simple language, they should save a good deal of otherwise necessary correspondence.

A patent may lawfully be granted for any new and useful art, machine, article of manufacture, or composition of matter.

A subject or citizen of a foreign country is entitled to a patent in this country on the same terms as a citizen of the United States.

If he has already filed an application for a patent for the same invention in a foreign country the inventor, whether citizen or foreigner, has twelve months from the date of the foreign application in which to file an application in the United States, after which he cannot obtain a valid patent.

The executor or administrator of a deceased inventor may obtain a patent upon an invention made by the person deceased, the patent issuing to the former in his representative capacity.

A patent may be mortgaged or assigned in trust, but it cannot be attached for debt or taken on execution, though a court may order an insolvent debtor to assign his patent to a receiver or other officer of the court for the benefit of his creditors.

If a new and useful article of manufacture or composition of matter is produced by a new machine or process, the inventor is entitled to separate patents for the article or composition and for the machine or process. Claims for the process or apparatus and for the product cannot now, as they once could, be included in the same patent.

A process may be carried out with the aid of a machine and still be patentable as a process, but the function or operation of a machine is not patentable as a process, though the machine itself may be patentably new.

A new combination of old elements is patentable if it produces a new result.

The substitution of one element for another element in a combination is not patentable if it is a recognized mechanical equivalent. If, however, the new element causes the combination to produce a new result it will not be held to be a mechanical equivalent.

The simplifying of a machine by reducing the number of parts may constitute patentable invention of a very useful kind, if the work of the parts omitted is taken up by the others and not dropped out entirely.

Patents will not be granted for inventions obviously intended and adapted for fraudulent or otherwise immoral purposes, such as gambling or adulteration or imitation of standard articles of food, but the mere fact that the invention, while made and adapted for a legitimate purpose, is capable of improper use, is no bar to a patent.

The invention must be fully disclosed in the application. Any attempt to hold back the disclosure of an ingredient in a composition of matter or of a step in a process is certain to be discovered if either is essential to the result, and if so essential, and discovered, will invalidate the patent.

The Patent Office receives no application for perpetual motion machines unless accompanied by a working model; and the model in such a case must actually work or the application will not be entertained. We will not prepare such an application or accept any fee on account thereof until the operation of the machine has been demonstrated to us, of course at the expense of the inventor. We honestly believe that it is impossible to make such a demonstration, but are willing to be convinced.

Many people still write to us asking if their patents can be extended. Up to 1870 extensions might be granted by the Commissioner. Some were granted from time to time. It was felt that the practice was subject to a good deal of abuse, and the Patent Act of 1870, which with its amendments is the law today, took away the Commissioner's power to grant extensions and vested it in Congress. The procedure under the Act would be to prepare a bill granting an extension and introduce it in the House of Representatives. It would then be referred to the House Committee on Patents. To the best of our knowledge the House Committee has never reported such a bill favorably. If it should do so and the bill should pass, the same thing would have to be done in the Senate. Attorneys' fees for presenting and arguing the case in Committee would be many times the cost of an ordinary patent. So far as we are aware not a single extension has been granted since the Act of 1870 went into effect forty years ago. It is therefore easy to figure what chances of success such an application would have.

Caveats are no longer received for filing. All a caveat ever amounted to was that it entitled the person filing it to notice of any conflicting application filed within twelve months. It was only useful in cases where the inventor had his main idea in shape, but did not wish to file his application until he had worked out some detail or details. It gave no more real protection than one of our patentability searches, which establishes the date just as certainly and effectively. In case of an interference the same ground had to be gone over in either case. We regarded a caveat in most cases as a waste of money, and never hesitated to say so.

If two or more distinct inventions are included in one application the Patent Office will require division, necessitating the filing of one or more additional applications, with the usual Government fees.

No new matter of invention can be introduced into an application after it has once been filed.

If an applicant, after an official action by the Patent Office, fails for one year to respond to it by argument or amendment, the application is held to have been abandoned. A new application may, however, be subsequently filed.

The Patent Office does not pass upon the question of *infringement*. That is for the courts. The question can only be raised and decided in a suit. An invention may show an actual and patentable improvement over an earlier patent, and may still infringe one or more of its claims, in which case a patent is granted for the new feature as a matter of course. In such a case the later patentee cannot use his own improvements without an arrangement with the earlier patentee, nor can the earlier patentee use them without the later patentee's consent. Nevertheless, such patents have frequently proved of great value.

Contracts are frequently made between employer and employee, under which the latter agrees to assign to the former all the inventions, or all the inventions of a certain class, that he may make while in the former's employ, in consideration of certain agreements on the part of the employer. Thousands of patents are obtained and assigned under such contracts. In the absence of a contract, if a workman uses his employer's tools and materials in making an invention, it has been generally held that the employer has a "shopright," amounting to a license to use the invention in his own shop and for his own purposes, but that he has no right to license others to use it and has no exclusive rights in it whatever, which leaves the title to the invention, subject to the license, in the workman himself.

Public use of an invention in this country for more than two years prior to the filing of an application, with or without the consent of the inventor, bars a patent. If such a public use is proved in court proceedings subsequent to the issue of a patent, the patent is invalid and is so adjudged. Public use is not necessarily a use by the public; it may be a use *in* public, such as an exhibition of the invention in operation to a number of people not under pledge of secrecy. An experimental use or a use in the presence of others merely for the purpose of obtaining their opinion as to operativeness or their suggestions as to details would not, however, be held to be a public use.

What is described in the specification but is not claimed is held to be dedicated to the public, and may not be included in the claims of any subsequent application. No patent will be issued on any feature once so dedicated to the public, even if it were originally patentable matter.

A mental conception is not a complete invention. It must be reduced to practice in one or both of two ways, physically, as by making the machine, article of manufacture or composition of matter or carrying out the process, or constructively, by applying for a patent. One has exactly the same legal effect as the other, except that the application should in every case promptly follow the physical reduction to practice if made. If one inventor uses diligence in reducing his invention to practice and another does not, the former is entitled to the patent even if the other was the first to conceive the idea.

Patented articles put on the market should always be marked with the word "Patented," with the date of the patent. Without this damages cannot be recovered from an infringer, unless it is proved that he was notified of the existence of the patent and of the patentee's claim of infringement, and even in the latter case he is not liable for any infringement prior to such notice.

"Patent Applied For" or "Patent Pending" are marks used to notify the public that the maker of the article has made application and expects to obtain a patent. Such a notice has no legal effect whatever, but practically tends to deter other persons from going to expense in the manufacture of an article which they may at any time be compelled to stop making. It is well to so mark any article placed on the market after application for a patent and before issue. After issue the mark "Patented," with date, should be substituted.

Any person who marks articles which he sells or offers for sale "Patented," when in fact neither the article nor any part or feature of it has been patented, is liable to a fine of $100 for every such article so marked.

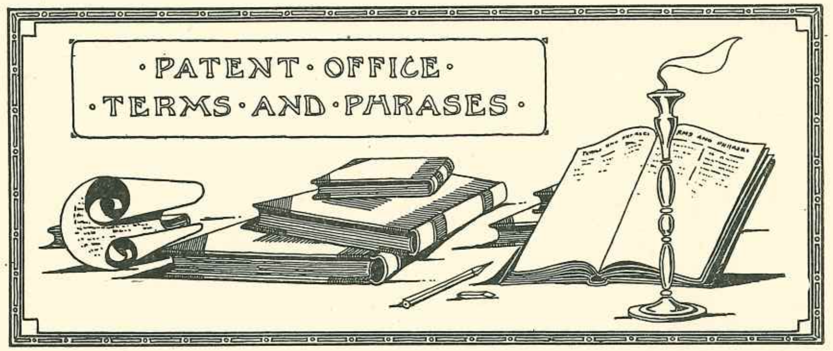
The signing of an application as a joint inventor by a person who has not furnished any inventive ideas, but is merely interested financially in the invention, is a mistake too often made, a mistake that will prove fatal if ever discovered, as the effect of it is to invalidate the patent.

When an application has been filed through us and allowed, and you can therefore safely show it, we shall be glad to help you place it and can often be of service to you.

Effective and practical improvements on old ideas are making more money than the original inventions ever made. Their claims as patented are less broad, but their market is broader.

Protect your invention, even if you have to assign part of it to a friend in order to get your patent, *before* you attempt to sell it or place it on royalty.

PATENT OFFICE TERMS AND PHRASES



Abandonment. Abandonment of an application occurs when the application is incomplete and is not made complete within one year after filing, or when the applicant lets one year pass after a Patent Office action without prosecuting his application. In these cases he may, within a reasonable time, file a new application, provided he can subscribe to the oath which must accompany it.

Action. A decision as to the points before the Examiner for consideration, embodied in an official letter to the inventor and his attorney. This may contain suggested changes in the specification of the application before him, rejection of all the claims, rejection of some of the claims on reference to prior patents or publications cited in the action, with the statement that others appear to be allowable, or an allowance of the application, including all the claims as they stand.

Amendment. A change in the wording of a claim or claims, accompanied, if necessary, by a change in description, to conform to a Patent Office action.

Allowance. When the Examiner has approved of the claims of the application as submitted or as finally amended the application is said to have been *allowed,* and a notice to that effect is mailed to the applicant's attorney. The final Government fee must be paid within six months after the date of the notice of allowance.

Appeal. A proceeding taken before a higher tribunal to reverse or modify the decision of a lower tribunal. In the Patent Office appeals may be taken from decisions of the Primary Examiner to the Board of Examiners-in-Chief and from the decisions of the Board to the Commissioner.

Argument. In proceedings before the Primary Examiner. A statement by the attorney for the inventor of the grounds for allowance of claims once rejected by the Examiner.

Art. As used in the statute conferring the right to a patent upon the inventor of a new and useful "art, machine or composition of matter," "art" means a method or process for producing a result. As used in proceedings in the Patent Office it means a given line of inventions, as explosive engines, repeating fire-arms or typewriters.

Attorney—Registered. A person permitted by the Patent Office to represent applicants for patents if so authorized in their applications.

Claim. The inventor's statement, usually framed by his attorney, of what he regards as new and invented by him. This may have to be modified in accordance with some action of the Patent Office, but as finally allowed, it legally defines his invention. The claims are inserted to conform to the statutes, which require that the patentee "shall particularly point out and distinctly claim the part, improvement or combination which he claims as his invention." What he describes but does *not* claim belongs to the public.

Commissioner. The Executive Head of the Patent Office, over which he has full control and supervision. He also sits as a judge to hear and determine appeals from decisions of the Board of Examiners-in-Chief. There are two assistant Commissioners. All communications with the Patent Office are addressed to the Commissioner of Patents.

Composition of Matter. One of the four statutory subjects of a patent for invention. Any new and useful substance or material formed or composed of two or more elements.

Drawings. The invention as described in the specification must be *shown* in the drawings. These must conform exactly to Patent Office rules. It is useless for the inventor, unless he is an expert draughtsman and thoroughly familiar with the rules, to attempt to make his own drawings for the Patent Office.

Examiner—Primary. On receipt of an application it is assigned, according to the nature of the invention, to one of the examining divisions of the Patent Office, of which there are now forty-three, not including the Division of Trade-Marks and Designs. This may be, for instance, the Division of Printing, Metal Working or Chemistry. Each division has a principal examiner with several assistants. The application, when reached in its order, is taken up by some one of them, who for this purpose is known as the Primary Examiner. It is his duty to examine the drawings and specifications carefully and to compare the invention as shown and described with prior patents and publications, foreign as well as American, and to determine whether or not, in his opinion, the invention as claimed is new, and therefore whether the claims or some of them should be allowed. His report results in an action, as before described. He may reverse an unfavorable report on argument or it may be reversed on appeal to the Board of Examiners-in-Chief.

Examiner of Interferences. The Examiner of Interferences decides the question of priority between two or more conflicting applicants, some or all of whose claims cover the same invention, after each contestant has had an opportunity to present testimony and argument.

Examiners-in-Chief. Three of these compose an appellate board having jurisdiction of appeals from the decisions of primary examiners.

Infringement. Any person, not the owner of the patent, who, without license, makes, uses or sells a machine, article of manufacture, or composition of matter or practices a process, covered by any claim or claims of a patent, *infringes* the patent, may be prevented by injunction from continuing the infringement, must account to the owner of the patent for his profits and in some cases must also pay damages.

Interference. A proceeding carried on in the Patent Office between two or more parties, each of whom is seeking a patent for the same invention. The purpose of the interference proceedings is to determine who was the first to conceive the invention and to reduce it to practice. An interference may be declared between an applicant and a patentee, if the applicant contends that he was the first inventor. A later applicant must furnish strict and complete proof of his assertion that he was actually the first inventor, and if he has failed, after conceiving the invention, to use diligence in reducing it to practice and in filing his application he loses, even if he was the first to conceive the idea. An interference may affect the whole or only a part of the claims of an application. The earlier applicant is called the senior party, and is not obliged to submit proofs unless or until proofs have been submitted by the junior party or parties. It is this advantage of not being compelled to take proof first that makes it important for the inventor to get his application on file at the earliest possible date. The junior applicant (the applicant last to file) frequently fails to take testimony on account of the expense involved, in which case the patent issues to the senior applicant without the necessity of taking proofs.

Invention. A new idea of means, not before patented, published or practiced. A new and useful art (method or process), machine, article of manufacture or composition of matter. A method of doing business, for instance, does not fall under any of these heads and is not, therefore, a patentable invention.

Letters Patent. The official grant, issued under the seal of the Patent Office and signed by the Commissioner of Patents, confirming to the inventor his exclusive right to his invention as described and claimed in the drawings and specification annexed, for the term of seventeen years, as prescribed by law. Usually referred to by the shorter term, "patent."

Machine. Any mechanical means by which a useful result may be produced, ranging from a simple tool to a combination of mechanical parts.

Method—Process. A means of obtaining a useful result by successive steps, as by placing potassium, hydrate of soda and aluminum in an outer vessel surrounding a receptable containing formaldehyde and pouring water into the outer vessel to generate heat and evaporate the formaldehyde without fire, a method used in disinfecting rooms and buildings. A method patent may be very broad and valuable, as it is usually independent of any specific mechanical means. The original Bell telephone patent and the first Goodyear patent (vulcanization of rubber) are good illustrations.

Petition. The petition in an application is directed to the Commissioner and prays that letters patent be granted for the invention described. The applicant, if refused such action by the Examiner as he thinks should be taken, may petition the Commissioner to direct it.

Power of Attorney. This places the application in charge of the designated attorney and empowers him to make amendments.

Oath. In the oath the applicant swears that he is the original inventor, and that he believes the invention is new and not before known or used by others, or patented or described in any printed publication, *or in use or on sale for more than two years before the date of application.* Unless he can truthfully swear to all these statements he is not entitled to a patent.

Patentability Search or Preliminary Examination. An examination of the Patent Office Records in the class to which an invention belongs to determine whether or not the invention shows patentability. This search is made by us without charge. The term Preliminary Examination has become so well established in the Patent profession that to call an examination of an invention or of records made in one's office a Preliminary Examination is misleading and when exposed incurs the disapproval of the Patent Office and of all reputable practitioners.

Reduction to Practice. A process is reduced to practice when it is successfully performed. A machine is reduced to practice when it is constructed, assembled, and adjusted ready for trial or use (thus a working model is a reduction to practice). An article of manufacture is reduced to practice when it is completely manufactured. A composition of matter is reduced to practice when it is completely composed. The filing of an application for letters patent is a constructive reduction to practice and has the same force and effect as if actual.

Reference, as used in the Patent Office. A prior patent discovered by a search or cited by the Examiner, which bears on the invention described in the application.

Specification. The written description of the invention accompanying the application and including the claims.

State of the Art. The progress that has been made to date in the class to which the invention belongs. This is shown by prior patents and publications and by articles and devices known to have been in public use.

Validity Search. This is an exhaustive and detailed examination of prior patents and publications, both American and foreign, to fully determine the scope and validity of a patent and the construction that will be given it by the courts, and is usually made with reference to pending or probable litigation. It requires a high order of special ability and is a work of days or weeks, somewhat in proportion to the number of patents in the class examined, and is charged for accordingly.

MECHANICAL TERMS. DEFINITIONS

The mechanical dictionaries, including those of special arts, contain more than 20,000 definitions. In this booklet our space limits us to a small number of terms that we have reason to believe are, on the whole, in most frequent use. The list is carefully compiled, and the definitions will be found reliable and we trust useful.

Abut: To extend on opposite sides of the same line or boundary.

Accelerate: To increase speed or movement.

Advance: To set or move forward, as to advance the spark in an automobile engine to obtain earlier ignition.

Aeroplane: A self-propelled vehicle, heavier than air, furnished with one or more normally rigid and substantially horizontal planes, motive power and suitable steering and balancing gear, and adapted to mount into the air and sustain or increase its altitude by forward movement and air resistance.

Airship: A self-propelled vehicle which attains and maintains its altitude by the aid of a body of gas lighter than air.

Align: To place in a straight line.

Alloy: A mixture of metals produced by fusion.

Alternating Current (see Current).

Amalgam: A combination of a metal with mercury without heat.

Ampere: The unit of electric current. Such a rate-of-flow as an electromotive force of one volt would force through one ohm of resistance. Best illustrated by the "miner's inch."

Annealing: The gradual cooling of a highly heated metal to increase its softness, malleability and flexibility, or to equalize its tensile strength.

Annular: In the shape of a ring.

Anode: The terminal connected with the positive pole of the source of current, at which the current leaves the terminal (anode) to pass through an intervening body to the kathode, through which it is transmitted to the negative pole.

Arc: The bow of light formed by the electric current between two electrodes. This is the source of light in the arc lamp.

Armature: A body of iron or other material that is subject to magnetism, placed on or near the poles of a magnet.

Atmospheric Pressure: At sea level this is 14.7 pounds to the square inch, decreasing approximately ½ inch for each 1,000 feet of altitude.

Atom: The chemical unit, too small to be visible under any practical magnifying glass.

Atomize: To separate into minute particles, not *atoms,* the term being therefore not strictly scientific.

Attenuate: To make thin. In a solid to reduce its thickness; in a liquid to reduce its specific gravity.

Automatic: Self-actuated and operated.

Automobile: A self-propelled vehicle.

Axial: With reference to the axis of a rotatable body, as the axial pitch of a screw.

Back Pressure: The resistance to the forward stroke of an engine piston.

Balance (in mechanics): Equilibrium or counterpoise.

Ball Bearing: A bearing whose axle turns on a ring or rings of balls rolling freely.

Ball Valve: A one-way, non-return valve consisting of a ball and a cup-shaped seat.

Battery (Electric): A combination of elements for producing electrical action, consisting of two or more cells. *Primary* Battery, one in which the current is supplied by dissolution of an element. *Secondary* Battery, one which is charged from an outside source of supply.

Belt Drive: A drive in which the power is communicated by a belt.

Bevel: To form an angle with a face or surface that is not a right angle.

Bifurcate: To fork into two branches.

Brake: A mechanical means of stopping or controlling movement by friction, usually applied to wheels or other rotating bodies.

Brass: An alloy of copper and zinc.

Bronze: An alloy of copper and tin, but may include other metals, as manganese or aluminum.

Brown & Sharpe Gauge: The gauge generally used in this country for wire and sheet metal. It runs from No. 0000 (.46 in.) down to No. 40 (00314 in.).

Burr: Roughness left by the mould on a casting, sometimes applied to the mark left by a cutting tool.

Bushing: A connection having two ends adapted to fit over cylinders of different diameter.

Cam: A disk fixed on a shaft and having its edge formed in such a way as to impart a certain desired motion to a lever or other mechanical member in its revolution.

Carburetter: Any apparatus by which air is passed over a hydrocarbon, gasoline for instance, for the purpose of mixing the air with the hydrocarbon and promoting its combustion when ignited.

Cell: The unit of a primary or secondary electric battery.

Chain Drive: A drive in which is communicated from the motor to the driven mechanism by sprocket wheels and chains.

Chair (R. R.): A finished casting adapted to hold a rail rigidly in its position relative to another rail.

Chassis: The rectangular framework of an automobile carrying the running gear.

Check Valve: Any automatic non-return valve.

Circuit: The conducting path laid for the electric current from the positive to the negative pole of the battery or other source of power.

Clutch: A device for connecting or disconnecting two shafts or a shaft and wheel. A device for connecting or throwing out the driven mechanism of an automobile while the driving mechanism is in motion.

Cogwheel: A wheel furnished with teeth adapted to mesh with those of another part of the same gear.

Conductivity (in electricity): The opposite of resistance to the passage of the current.

Cone: A regular body formed on a circular base and tapering uniformly to a point.

Conical: Resembling a cone in form.

Connecting Rod: A rod or bar pivoted at one end to a rotary part and at the other to a reciprocating part (as the cross-head of an engine), and adapted, with the aid of the crank, to convert a reciprocating into a rotary motion, or vice versa.

Crank: An arm formed or fixed upon a shaft and adapted to revolve radially with it.

Crank Shaft: The engine shaft carrying the crank and fly wheel.

Crosshead: A part of the engine moving reciprocally in guides, connected at one end with the piston and traveling with it, and pivotally connected at the other end with the connecting rod.

Cross Section: A section (cut) taken transversely, at right angles or in a plane indicated by letters or otherwise.

Current (Electric): A movement or flow over the path of a circuit of what we term electricity or electric action. We know how it can be produced, how it manifests itself, and what it will do, but we do not yet know what it is. *An alternating current* is one whose direction is rapidly reversed. The latter was unknown before the invention of the dynamo. All battery currents are direct.

Dead Center: When a straight line would pass lengthwise along the axis of the connecting rod, the axis of the crank shaft and the axis of the pivotal connection between the connecting rod and the crank, the engine is on a dead center.

Deflect: To turn aside, the moving body or point deflected continuing its movement at an acute angle.

Detachable: Capable of being disconnected from another body or part.

Diameter: Properly a straight line through the center of a circle or sphere from one point on the circumference or surface to another. Loosely used to describe a line dividing any area into two substantially equal parts.

Differential: Marking or indicating a difference.

Dip, of a stratum, bed, or vein: Its angle to a horizontal plane, measured in degrees.

Direct Acting Engine: One that drives directly through piston, cross-head and crank, as distinguished from rotary or turbine engines.

Dog: A short arm pivoted at one end and adapted to engage at the other end with notches or teeth on a shaft or gear to cause or prevent a rotary movement.

Dowel Pin: A pin set in a connecting edge or face and adapted to engage with a recess in an opposite face.

Drop Forging: Forging by means of two steel dies, one being "dropped" or forced down upon the hot metal blank while it is held in position on the lower die, thus forging both sides in one stroke.

Ductile: Capable of being elongated without being pulled apart. In the case of a metal, capable of being drawn into wire.

Dynamo: A machine for converting mechanical energy into electrical energy by magnetic induction, usually brought about by rotating coils of copper wire, wound around an armature, at right angles to the field of a magnet.

Eccentric: A disk having its axis outside its center, its use being similar, for certain limited purposes, to that of a cam.

Effective Horse Power: The horse power over and above that required to drive the engine when it is doing no work.

Electrodes: The terminals of an electric source. Usually applied to the terminals on either side of a body thrown into the circuit for a special purpose, as the chemical solution in an electro-plating bath, the air space between the carbons of an arc light or the body of a murderer in the electric chair.

Electro-Magnet: The basis of the dynamo; a magnet produced by passing an electric current through a coil of insulated wire surrounding a core of magnetizable material, properly soft iron.

Electromotive Force: The form which puts and keeps the thing which we call electricity in motion. Its unit is called a volt.

Engine: A compound machine through which power is applied to produce a physical effect.

Exhaust: All steam and gases which escape from the cylinder of an engine or are forced out of it after the stroke.

Expansion: An increase in bulk, usually with a corresponding decrease in density.

Explosion: A sudden and violent expansion.

Explosive Engines: Engines in which the motive power is generated by the explosion of gas or vapor in a confined space.

Fabric: Literally, any structure produced by skill and labor, but usually confined to textile, or woven, fabrics.

Factor of Safety: A figure used to divide the theoretical strength of a structure to determine the practical strain to which it may safely be subjected. This figure is based on experience, and of course varies with different structures and materials.

Field (Magnetic): The region of magnetic influence surrounding and lying between the poles of a magnet.

Flange: An upturned edge; usually, though not necessarily, applied to the upturned edge of a wheel, disk or circular orifice.

Flue: A duct for conveyance of air, smoke or gases.

Fly Wheel: A wheel, mounted on the crank shaft of an engine for the purpose of accumulating power and equalizing movement.

Foot Pound: The unit of work. The power required to lift one pound one foot in one minute.

Force (Mechanical): Power which produces or tends to produce motion or an alteration in direction. A body at rest has force, which can be measured by the amount of force required to set it in motion.

Four Cylinder (Explosive) Engine: In this type of engine the upward (return) stroke (1) expels the burned out products remaining in the cylinder into the exhaust, the next downward (suction) stroke (2) draws in the charge from the carburetter, the next upward stroke (3) compresses the charge in the upper portion of the cylinder, and when it is ignited, the next downward stroke (4), under the explosion, does the work. In the Two Cylinder type the burned charge is left to escape of itself into the exhaust after the explosion during the downward stroke of the piston, and the next charge enters the cylinder, where it is compressed and ignited on the upward stroke. In the four cycle type, therefore, the explosion occurs before *every other* downward stroke; whereas in the two cycle type it occurs before *every* downward stroke.

Friction (Mechanical): The resistance which a moving body meets from a body in contact with which it moves.

Friction Drive: A drive in which power is transmitted through frictional contact of driving with driven parts.

Front Elevation (Mechanical Drawing): A front view of a machine or other object, without perspective, that is, without allowance for distance or angle of vision. Similarly, *Side Elevation* and *Rear Elevation.*

Function: The function of a mechanical part is the thing it is designed and arranged to do.

Fusible (Metal): Capable of being reduced to liquid form by heat.

Galvanic Battery: Another name for the Voltaic Battery.

Gas: A fluid that tends to expand, in distinction from a liquid, which does not tend to expand except very slightly, after compression, and which on release from compression merely returns to its original bulk. A fixed gas is one that does not tend to return into the fluid or fluids of which has been formed. A vapor is a gas into which a liquid or solid is converted by heat. A solid is any substance in which the particles adhere together, and do not move readily upon one another as in a fluid.

Gas Engine, Gasoline Engine: An engine in which the power is furnished by the explosion of a gas or a mixture of gases.

Gear: A series or assemblage of mechanical parts for the purpose of transmitting power.

Generator (Mechanics): A producer, a vessel or chamber in which something, usually a fluid, is produced.

Generator, Dynamo-Electric: An apparatus in which electricity is produced by the mechanical movement of conductors through a magnetic field.

Girder: In building construction, a principal beam supporting cross beams.

Globe Valve: A spherical valve having a seat, of which the interior is usually spherical and always circular in cross section.

Hangar: A shelter or storage house for an airship or aeroplane.

Hanger: A bracket holding the bearings of a shaft.

Head of Water: Measured by the height of surface above discharge.

Heat Unit: The heat required to raise one pound of water from 30° to 40° Fahrenheit.

Helix: The curve described by a straight line wrapped around a cylinder at an acute angle to its axis.

Horse Power: 33,000 foot pounds. Power required to raise 33,000 pounds one foot in one minute.

Horse Power, Electric: 746 watts. (See Watt.)

Ignite: To set on fire. In a gasoline engine, to fire the charge of air and gasoline vapor in the cylinder, usually by means of an electric spark.

Impulse (Mechanical): A force more or less suddenly communicated to a body.

Incandescent: White or glowing with heat.

Induced Current: The current produced in a conductor as a result of moving it so as to cut the lines of magnetic force, as in the operation of a dynamo.

Induction: The operation of the electromotive force set up as above described, which, acting through a circuit, produces a current.

Insulation (Electricity): Placing non-conducting material next to a conductor to prevent loss of a charge or leakage of current.

Insulation (Heat): Placing material which is a poor conductor of heat next to the article to be protected to make its loss of heat as small as possible.

Intake: A name variously applied to an orifice, valve or pipe through which a fluid is supplied to a chamber, as the pipe in a gas engine leading from the carburetter to the cylinder.

Intersect: To cut between. One line intersects another when it cuts it at any point between its two ends; it bisects it when it cuts it into two equal parts.

Inverse: In the reverse or contrary order or to the reverse or contrary extent.

Iron: Primitive processes of iron making aim at the production of wrought iron directly from the ore by oxidizing the carbon in the smelting furnace and subsequently forging and re-forging the metal. All modern processes are indirect, starting with metal previously smelted and cast, the main object of all of these being to remove the carbon contained in cast iron in order to adapt the product for the purpose for which it is intended and to further adapt it for special purposes through the addition of fixed percentages of carbon and by alloying it with other metals such as chromium, manganese and phosphorus, the product being steel of various descriptions, grades and characteristics. Wrought iron is made at a comparatively low heat by working it over, "puddling" and subsequent forging, while steel made by modern processes is made at a much higher heat, being completely fused. Cast iron being cheap and easily worked with tools has many uses with which its brittleness and structural weakness do not interfere. Malleable (annealed) cast iron is extensively used, especially for small hardware specialties, and wrought iron carefully made and compressed in forging is useful for certain special purposes by reason of its toughness and tensile strength; but for nearly all uses wrought iron has been completely superseded by steel, the low carbon steels being much cheaper and combining the valuable qualities of wrought iron in a considerable degree with greater structural strength.

Jacket: Insulated material placed around a cooled or heated pipe or other body to prevent the passage of heat to or from it.

Jacket (Water): A hollow chamber, usually annular in section, placed around a pipe or other body to be cooled, and adapted to carry a current of water.

Joint: The place where two or more things join.

Jump Spark (Ignition, Explosive Engines): In this method of igniting the charge in the cylinder the sparking points (electrodes) are kept at a very short fixed distance apart, and when the piston reaches the limit of its upward compressing stroke the circuit is automatically closed and a spark "jumps" from one point to the other, igniting the charge.

Kilowatt: 1,000 watts. 1 watt = 1 ampere × 1 volt.

Laminated: Consisting of thin plates or layers, these being sometimes called laminae.

Linear: In or belonging to a line, as linear distance or linear measure.

Liquid: A fluid substantially without elasticity and very slightly compressible, as distinguished from a gas, both being fluids.

Load: The measure in horse power of the actual work being done by an engine or motor in operation.

Lost Motion: Any motion of a piece of mechanism which does not go toward the performance of its proper function.

Load of a Dynamo: The number of watts of current delivered by it in operation.

Machine: An instrument formed by combining two or more of the mechanical powers. Machine always means a combination of parts. A single instrument is a tool.

Magnet: A body having a positive and negative pole, with either pole capable of attracting the opposite or repelling the like pole of another magnet, or of attracting magnetizable substances. This applies both to natural and electro magnets. (See Electro-Magnet.)

"Make and Break" Ignition: Gas Engine ignition in which the sparking points are brought together by the compression stroke of the piston and the igniting spark is formed as they separate.

Mandrel: A rod or bar supported at one end, over the other end of which is formed or placed a body or substance to be rotated or otherwise manipulated.

Mechanical: According to the laws of mechanics; by a machine; by physical power applied through mechanism.

Mechanical Powers: The six elementary mechanical powers are the lever, the wheel and pinion, the pulley, the inclined plane, the screw and the wedge. All mechanical movements result from modifications or combinations of these, and the wheel and pinion and the pulley are really modifications of the lever, just as the screw and the wedge are modifications of the inclined plane.

Metallurgy: The art of separating metals from ores.

Melting Points: Tin, 442; lead, 617; zinc, 700; copper, 1,975; ordinary cast iron (about), 2,730, Fahrenheit scale.

Motor: An organization or combination of parts, itself set in motion by the operation of some natural force, for imparting motion to other mechanism.

Natural Draft: The inflow of air into a furnace or heater caused by the rise and escape of heated air through the flue. When this inflow is increased by a blower it becomes forced draft.

Needle Valve: A valve with a point adapted to engage with a seat correspondingly recessed.

Negative Pole: That pole of an electric source through which the electric current is supposed to enter and flow back to the source, the source being, for instance, a voltaic battery.

Non-Conductor (Heat): A substance or space that effectively obstructs the passage of heat; a nearly complete vacuum is a good non-conductor of heat, so is a layer of mineral wool.

Non-Conductor (Electricity): A substance, like glass, that offers a very high resistance to the electric current.

Oblique: At an angle other than a right angle. In a drawing an oblique section is one taken through the figure on a straight line drawn at such an angle, in distinction from a transverse section.

Ohm: The electrical unit of resistance.

Opaque: Dark; not translucent; letting no light through.

Outstroke (Gas Engine): The stroke away from the igniter.

Pawl: A short bar pivoted at one end and having its other end adapted to engage with the teeth of a ratchet wheel or rack.

Penstock: A conduit leading a column or stream of water to a turbine.

Percolate: To filter or penetrate through minute channels or crevices.

Perforate: To bore through; to pierce.

Perimeter: The circuit or boundary in detail of any plane figure, however original in shape.

Periphery: The general outline of a circular or approximately circular figure or body.

Perspective: An object is shown in a drawing in perspective when it is shown as it would actually appear to the eye, with all necessary shading and foreshortening.

Pitcock: A cock to let out air from a chamber or pipe.

Pinion: A small cogwheel adapted to mesh with a larger one.

Piston: A short cylinder closed at one or both ends, with or without a valve, movably fitted within another cylinder and adapted to receive the pressure of, or to operate upon, a fluid contained in the large cylinder.

Pivoted: So fastened or secured as to be movable only in an arc of a circle.

Plane: A flat, smooth surface without curvature, elevations or depressions.

Pneumatic: Relating to air or wind.

Positive Pole: The pole of an electric source out of which an electric current is supposed to flow.

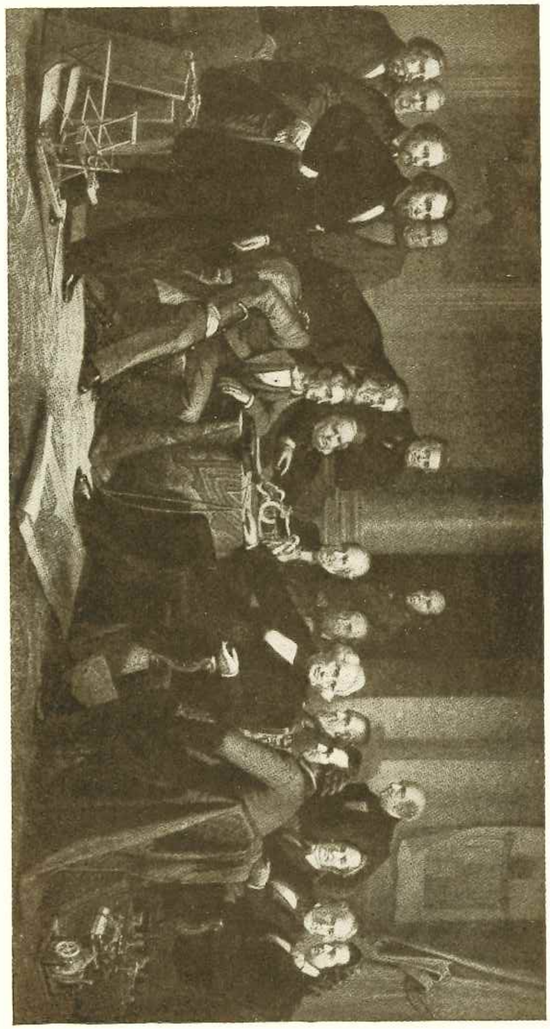
Potential (Electricity): Effective—"Difference of Potential" between the positive and negative poles of a battery indicates the net effective, or available electro-motive force.

Rabbet: A groove cut in the edge of a plank to admit a "tongue" cut in the edge of the other.

Rack: A straight bar with teeth on one edge adapted to engage with the teeth of a cogwheel.

Radial: Extending outward from a center.

Radius: A straight line from the center of a circle to its circumference.



BOGARDUS Iron Architecture, &c.
SAXTON Mint & Ccast Sur'y Machinery
PROF. HENRY Electricity as a Motor
ERICSSON Caloric Engine, Monitors, &c.
BIGELOW Carpet Loom, &c.
DR. MORTON Etherization
COLT Revolvers
PETER COOPER Gelatine, &c.
MOTT Works in Iron, Fuel, &c.
DR. NOTT Management of Heat, &c.
SICKLES Steam Cut-off, &c.
BURDEN Horse Shoe Machine
JENNINGS Friction Matches, &c.
BLANCHARD Eccentric Lathe, &c.
McCORMICK Reapers
GOODYEAR Vulcanizing Gum Elastic
MORSE Electric Telegraph
HOE Rotary Press, &c.
HOWE Sewing Machines

A GROUP OF NOTED INVENTORS

Ratchet wheel: A wheel having teeth adapted to be engaged by a pawl.

Rear Elevation: See Front Elevation.

Reciprocating Movement: A "back and forth" movement, as that of an engine piston.

Reflect: To bend or throw back.

Resilient: Tending to spring back into position on release from pressure, bending, stretch or torsion.

Resistance (Electrical): The nature of the conducting material or anything else in a circuit which opposes the passage of the current. Resistance is measured by ohms. All metals have more or less resistance. The less resistance the greater the conductivity, and the smaller a conducting wire the higher its resistance. Aluminum in proportion to weight has less than half the resistance of copper, in proportion to bulk nearly twice as much. The resistance of iron is much greater than that of either.

Rheostat (Electricity): An instrument used to adjust resistance, to bring the current to a fixed standard.

Rib: A prominence running in a line on the inner or outer surface of a structure and intended to reinforce it.

Rivet: A bolt fastened by hammering on both ends.

Rotate: To turn on an axis.

Sectional View: A view of an object or figure as it would appear if intersected by a plane.

Serrated: Notched or cut like a saw.

Shaft (in mechanics): A cylindrical piece of mechanism rotating in journals and adapted to transmit power through cranks and pulleys.

Shaft Drive: A drive in which the driven mechanism is operated from the shaft directly or through gearing, as distinguished from a friction or belt drive.

Sheave: A pulley with a grooved rim.

Side Elevation: See Front Elevation.

Sleeve: A hollow mechanical part fitting closely over another part, forming a sleeve joint.

Slot: A depression or aperture adapted to receive a tool or a part, like the slot in the head of a screw.

Smelting: A process of extracting metal from ore by the use of heat.

Spanner: A key for turning nuts. If adjustable by means of a screw thread it is generally called a wrench.

Specific Gravity: The weight of a given bulk of a substance as compared with the weight of the same bulk of distilled water at a temperature of 60° Fahrenheit. By this standard the specific gravity of alcohol is 0.792; aluminum, 2.560; cast iron, 7.207, and lead, 11.350.

Specific Heat: Taking the amount of heat required to raise one pound of water one degree as a standard, the relative amount required to raise one pound of any substance one degree, expressed in decimals, is called its specific heat. Thus the specific heat of mercury is 0.0333. In other words it takes .0333, or 1/30 as much heat, to raise one pound of mercury one degree as it takes to raise one pound of water one degree. The specific heat of iron is 0.0110; of copper, 0.9515, and of lead, 0.0314.

Sprocket Gear: A gear in which the wheels are furnished with teeth which engage with the links of an endless chain. Frequently referred to as a chain gear or chain drive.

Stamping: Forming small articles out of sheet metal by the stroke of a die. An upper and lower die may be used as in drop forging. The metal is stamped cold, otherwise the process would be called drop forging.

Steam: Water converted into a gas by heat. Not a fixed gas, as it tends to return to its original form through condensation. Saturated steam, or wet steam, is steam holding water in suspension as a visible mist or vapor. The steam itself is never visible. Dry steam is steam without mist. Superheated steam is highly heated dry steam. Live steam is steam taken directly from the boiler, steam that has not entered the cylinder of the engine and has done its work.

Steam Boilers: The principal types are plain cylinder (the original form), cylinder tubular, cylinder flue, return tubular, return flue, water tube, locomotive, sectional, and combinations of these. The objects of the later types include better access of heat to the water, rapid development of steam pressure, increased horse power in proportion to weight and space, and economy of heat. As it is, more than 80 per cent of heat, and therefore of fuel, goes to waste in the best boilers.

Steel: The method of making steel up to 1770, when Huntsman invented the crucible process, was to subject iron bars packed in charcoal to a red heat for several days. The product is known as "blister steel." In the crucible process, as at present conducted, nearly pure iron, previously decarburized, is melted in a closed melting pot with definite proportions of carbon and manganese or other ingredients with which it is desired to alloy the product. This produces a steel adapted for cutlery and fine tools. Structural and railroad steel were unknown until the Bessemer (converter) and Siemens-Martin (open hearth) methods came into use. A change in the lining of the Bessemer converter was made by Thomas and Gilchrist, resulting in the "basic" process. All these handle the material in very large charges and get rid of the carbon by bringing air in contact with the particles of fused cast iron at very high temperatures, thus oxidizing it. In the Bessemer process the air is blown through the fused iron in the converter until the carbon is oxidized, and in the open hearth processes the same result is attained by bringing the incandescent gases of combustion, mingled with air, through flues, down upon the charge, which is spread upon an "open hearth." The Thomas-Gilchrist "basic" method removes any phosphorus there may be in the cast iron, which the Bessemer process as originally practiced does not do. These processes have made steel much cheaper than wrought iron and adaptable to a wide variety of industrial purposes.

Storage Battery: The combination of a number of secondary or storage cells to form a single electrical source, charged with a direct current, and, for motor purposes, from a dynamo.

Stroke (of an engine): The extreme reach of the piston in its movement in the cylinder.

Tangent: A straight line which touches a curve, but, if prolonged, does not cut it.

Tensile Strength: The amount of pulling strain, measured in pounds to the square inch, that a substance will stand without parting.

Textile: Woven or spun.

Thermometer: An instrument for measuring heat. The Fahrenheit scale has an arbitrary zero, with a freezing point of 30° and a boiling point of 212°. The Centigrade zero is the freezing point and the boiling point is 100°. Reaumur divides the space between the freezing and boiling points into 80 degrees. Thermometers adapted for measuring very high degrees of heat, like the melting points of most metals, are called pyrometers.

Thermostat: An instrument adapted to be actuated or to actuate other mechanism when the surrounding temperature reaches a certain degree.

Throttle Valve: The valve that regulates the supply of steam to the cylinder. The lever controlling this valve is usually referred to as the "throttle."

Torsion: Twisting. The torsion of a thread or wire, however, is the force with which it tends to return when twisted and then released.

Traction: The act of drawing. A traction engine or motor is one that draws vehicles after it.

Trajectory: The curved path of a projectile resulting from the force of the discharge modified by gravity and the friction of the air.

Turbine: A horizontal water-wheel with blades or buckets set at an angle similar to that of the blades of a screw propeller, actuated by the vertical pressure of a column or head of water. The turbine engine operates on the same general principle, under steam pressure against its blades in the direction of its axis.

Unit of Heat: See Heat Unit.

Unit of Light: One candle power; the light emitted by one spermaceti candle, 6 to the pound, burning 120 grains of spermaceti per hour.

Unit of Pressure: One pound to the square inch. A pressure of one atmosphere is 14.7 pounds to the square inch at the sea level; two atmospheres, 29.4, etc.

Unit of Work: One foot pound (see Foot Pound).

Utility: Adaptability to use.

Volt: The unit of electromotive force.

Voltaic Cell: The combination of two metals, which, when dipped into a liquid called an electrolyte and connected outside the electrolyte by a conductor, will produce an electric current. A simple form of voltaic cell is composed of a plate of zinc and a plate of copper partly immersed in a solution of sulphuric acid and water and connected outside the solution by a copper wire.

Voltaic Battery: A series of voltaic cells combined into a single electric source. Also known as a Galvanic Battery.

Washer: A ring of metal or other suitable material used to relieve friction or tighten a joint.

Working Drawing: A drawing made to scale and proportioned substantially as the machine or article is intended to be constructed.

To do business with a stranger you must protect your invention first and then show it to him. Any other course is either unsafe or useless.

Sound and practical ideas, protected by good patents, never had so wide a market or brought as good returns to the inventor as today.

When you have made an invention let us make a search. It costs you nothing, helps to protect your rights and may save you money.

Do not despise small inventions. They are frequently easier to handle than those which look big, and are apt to bring quicker results.

It is better to invent an ash can that can be used than an airship that can't, or that costs $10,000 to test.

If your invention proves patentable on search lose no time in protecting it.

Patents in Foreign Countries

FOREIGN MARKETS FOR AMERICAN INVENTIONS

There are in the civilized countries of the world, outside the United States, more than 250,000,000 people, whose wants, in daily life and in many departments of industry have developed to the level of our own, and millions more who are learning to an increasing extent to use the products of inventive skill. The utility of an invention of practical merit, and its possibilities of profit to the inventor are never confined to one country. If it appears to be of value there, it is wanted elsewhere.

Our inventors have a long lead over those of foreign countries, not only in the number of inventions, but in their practical utility and value. Foreigners look to us constantly for new ideas, which they are glad to pay for if they must, and to appropriate without payment if they can. In the latter case, failure to patent the invention abroad affords the opportunity. Thousands of American inventions are manufactured in Europe and sold all over the world, outside the United States, that have never paid a dollar of royalty to the American inventor. Our courts can protect him only against the manufacture, use or sale of the patented article in *this* country. If he has not protected his invention abroad, all other markets are open to his foreign imitators. If the principal manufacturing countries of Europe had not benefited by thousands of American inventions, unpatented abroad, they would now be lagging far behind this country in the useful arts, and American inventors who *have* protected their inventions abroad have, in the aggregate, profited largely by the foreign demand for the product of their brains.

Delay Means Risk of Losing Foreign Rights

It would be better for the inventor if he could thoroughly test the American market for his improvement before deciding the question of patenting it abroad. This, however, is rarely possible and the attempt to do it involves risk.

Nearly all foreign nations grant patents to the first applicants, whether actual inventors or not; so that, once the invention is disclosed to the public here, any person, if the time to obtain a patent in the foreign country has not already expired, may apply for and obtain one.

The International Convention

In the countries and colonies subscribing to what is known as the International Convention application may be delayed until the last day of the twelve months following the filing of the application for the United States patent. These countries are at present:

- Austria
- Australia
- Belgium
- Brazil
- Ceylon
- Cuba
- Denmark
- France
- Germany
- Great Britain
- Holland
- Hungary
- Italy
- Japan
- Mexico
- New Zealand
- Norway
- Portugal
- Santo Domingo
- Servia
- Spain
- Sweden
- Switzerland
- Tobago
- Trinidad
- Tunis
- United States of America

In regard to filing under the provisions of the International Convention, that is, after the issue of the United States patent, but before the expiration of 12 months from the date of filing the application in this country, we would state that this is inadvisable unless it cannot be otherwise avoided because in most countries there is an additional tax levied by the Patent Office or Bureau of each foreign country, or some additional requirements are made, necessitating additional expense, and to avoid this expense it is advisable to have the foreign applications filed before the patent issues in this country.

In British India and Canada applications may be filed at any time within one year from the *issue* of the United States patent and in Norway within six months. In Russia, and in some of the South American countries, the application may be filed at any time before the expiration of the shortest patent already granted, with the risk, of course, that some other person may in the meantime step in with an application, in which case the latter obtains the patent and the inventor has no redress. Except in such cases and in cases where the inventor can take advantage of the International Convention to delay his foreign applications a few weeks or months, the application must be filed before any possible publication in the foreign country. Publication is considered to have taken place if any drawing, cut, model or description disclosing the invention has been made public in the foreign country in question or where the Official Gazette of the United States Patent Office, describing the patent, has had time to reach it through the mails. With the exceptions already noted, *any* disclosure in a foreign country before application is fatal to the inventor's rights, and the foreign rights, unless immediately protected, are endangered by any disclosure here.

When the Question of Foreign Patents Should Be Taken Up

The question of foreign patents should therefore be taken up, at the latest, as soon as an allowance has been obtained on the American application, especially if the invention is to be disclosed and a market sought for it here before issue. In deciding the question the inventor cannot wait to make a commercial test of the American market, but must rely on his own knowledge and on what he can learn of the probable demand for what he has produced. It is safe to say that, with few exceptions, an invention of distinct merit and usefulness, one that meets a demand in this country, is well worth patenting abroad, at least in Canada, Great Britain, Germany, France, Belgium and Austria, frequently in other European countries; Mexico, Cuba, Australia and Japan; and, in special instances only, in some of the British colonies other than the two already named, and in some of the South American republics.

What Foreign Patents to Apply For, What to Omit

Foreign patents should never be applied for indiscriminately or without the best information obtainable as to industrial conditions in the countries under consideration. This we are always glad to supply. Attorneys who are more anxious to increase their bills than to render good service encourage their clients to make heavy investments in foreign patents with little regard to probable returns. We reject from consideration in nearly every case a number of countries, because patents in such countries entail expense that is wholly useless or unnecessary. For instance, in the case of many machines and articles of manufacture patents in the United States and the manufacturing countries of Europe, with, in a few instances, Japan, would make it unnecessary to patent the invention in the South American countries, as those countries would not manufacture the patented article, but would buy it, if needed, through the usual trade channels. The same thing would be true of many of the British colonies. Close attention should be paid to the volume and character of the products of a foreign country, including manufactures. A cotton picker needs no protection except in the United States, Egypt and British India. A valuable improvement in harvesting machinery should be patented in Hungary and Russia as well as in the principal manufacturing countries of Europe, to which it might be well to add the Argentine Republic, which is a large producer and exporter of wheat. Improvements in spinning and weaving (textile) machinery would usually be well protected by patents in the United States, the five principal manufacturing countries of Europe, and Japan. Mining machinery and processes should, if possible, be protected much more widely. Inventions of this class need patent protection in the Transvaal, Australia and Mexico, and in some of the South American countries, in addition to those of Europe.

Instance of a Large Profit From a Small Country

Some of the smaller countries offer good opportunities in special lines. About 1893 J. C. Todd, of Paterson, N. J., took out patents in the Bahama Islands for cleaning (decorticating) sisal, from which a valuable cordage fibre is obtained. The Bahamas had a population of less than 20,000, and the original Todd patent was probably the first issued in years. But the soil of the islands, useful for little else, was well adapted for sisal, as had been already proved, and the Todd inventions built up from small beginnings a valuable industry, and brought Mr. Todd a profit in five years, from the Bahamas alone, of $45,000.00. His Mexican patent, which would have proved of much greater value, as Yucatan raised more than 80 per cent of the world's supply of sisal fibre, was opposed. Mr. Todd won on appeal, but failed to respond on the second and final appeal, which went against him by default, this result being due to his advanced age and illness. Mr. Todd's inventions, protected by these two foreign patents alone, would have covered all the then known sisal producing territory in the world. Mr. Todd took out United States and British patents, simply in order to check possible infringements in the stage of manufacture.

Knowledge of Industrial Conditions of Great Value

These illustrations and many others that could readily be cited make it clear that knowledge of the productive industries of foreign countries and of their trade relations is of great value to the American inventor, and that such knowledge must be obtained and must be used with judgment in order to avoid paying unnecessary patent fees and in order to get the best results. Hundreds of foreign patents issued to American inventors prove worthless for lack of such knowledge and judgment, because in the foreign country in which the inventor blindly or under careless or dishonest advice applies for a patent, there may be no need, use or demand for his invention or for any invention of its general class. In addition to this, many inventors are induced to take out a large number of foreign patents when perhaps half a dozen would practically protect them all over the world, by reason of the nature of the invention itself, manufacturing limitations and trade conditions. Long experience and study of the conditions, with specific information, to which we are always adding, enable us to give sound advice as to the selection of countries in which to place foreign applications, and to save expense for our clients. We can in most cases furnish a list of foreign countries in the order of what we regard as the advantages they offer to the patentee of a particular invention, giving our reasons in each case. A client who follows one of these lists, taking the countries named in their order, may rest assured, whether he makes application in only two or three or a larger number, that he is getting the best possible value for his expenditure.

American Corporations Often Purchase Foreign Patents

That the great American corporations operating under patents are alive to the value of the foreign field is shown by the number of plants established in foreign countries by such concerns as the Westinghouse Company, the American Tobacco Company, the Western Electric Company and many others. To all these of course foreign patents on meritorious American inventions in their own lines are of distinct value. In negotiations for the sale of American inventions to the larger corporations the foreign rights nearly always cut a considerable figure in the proposition.

Some Foreign Patents That Have Paid

Among foreign patents that have paid largely through operation, royalty or outright sale we may mention the Brush arc light, the incandescent light, the Welsbach light, the Westinghouse railway and electrical patents, the electric welding patents, sold in England for $1,250,000, and the telephone and typewriter patents. Hundreds of others have made rich returns.

No American inventor can afford to let his patent go to issue without giving the foreign field careful consideration. Experienced and successful inventors realize this, and also realize the increasing foreign demand for American inventions. Many of them have reason to regret their failure, on former occasions, to protect valuable inventions abroad, and an increasing number are taking out judiciously selected foreign patents on their new inventions.

FOREIGN PATENT OFFICE PROCEDURE

The United States Patent Office examines the drawings, descriptions and claims of each application for patentability, with special reference to the novelty of the invention described and claimed. Nowhere, except possibly in Germany, is the examination as thorough. In France, on the other hand, there is no examination whatever for novelty, examination being merely for the purpose of determining whether the invention is of a class not by law unpatentable, and whether the application, including the drawings and description, complies with the technical requirements of the law.

Leading countries which follow the American system to a greater or less extent are

Austria
Germany
Norway
Canada
Great Britain
Russia
Denmark
Japan
Sweden
Australia

The more important countries in which the French system prevails are

Argentine Republic
Belgium
Brazil
Switzerland
France
Hungary
Mexico
Spain

In Switzerland there is an examination for novelty, but the patent must issue if insisted on by the inventor.

Taxes

All the countries above named, except Canada and Mexico, impose a small annual tax on patents. In the Australian Commonwealth taxation begins at the end of the seventh year, and in Great Britain at the end of the fourth. France imposes a regular yearly tax. In other countries annual taxes increase with the age of the patent. The patent always issues with the taxes paid for the first year.

Working

Working the invention within certain specified time limits is required by the general patent laws of all the foreign countries named except Great Britain and Mexico. Citizens of the United States owning patents in Germany are exempted from working their inventions. In many countries a nominal working, which can be made through our correspondents, will satisfy the law.

Exposure and Opposition

In some of the more important foreign countries pending applications are placed on public record (exposed) for a period of time, usually not over two months, in order to give any person interested an opportunity to oppose the grant of patent. Opposition, if made, is a regular legal proceeding, in which both sides have a full hearing. It rarely occurs, but when it does occur, the whole contest can usually be conducted by correspondence, including the necessary affidavits and exhibits, without great expense.

PATENTEE WELL PROTECTED BY FOREIGN LAWS

There is no doubt that the American inventor is better protected, as a rule, in foreign courts and under foreign laws, than he is in his own country.

In construing the patent and defining the patentee's rights under it, foreign courts incline to look at the specification as a whole rather than to the claims alone. The question with them is not what has been claimed, but what has actually been invented, whether fully claimed or not.

In the United States, on the contrary, the inventor must "particularly point out and distinctly claim the part, improvement or combination which he claims as his invention or discovery." Revised Statutes, Sec. 4888. Whatever of new and patentable invention may be described and shown in the specification of the patent *which is not already covered by the claims* is considered to have been dedicated to the public.

Criminal Liability of Infringers

In the Argentine Republic, Austria, Brazil, Denmark, Chile, France, Germany, Hungary, Italy, Japan, Mexico, Norway, Russia, Spain, Sweden and Switzerland, and in a number of less important countries, wilful infringers are not only liable for civil damages, but to fine and imprisonment under the criminal law. In Germany, Austria, Hungary and Japan the question of validity cannot, as here, be raised in an infringement suit. Validity can only be questioned in a suit to annul the patent. A patent is incontestable on the question of novelty after two years in Russia or after five years in Germany.

Fair Treatment in Foreign Courts

Foreign laws, both in their application by the courts and in their administration by the civil and criminal authorities, almost uniformly favor and protect the patentee, and in some features might well be adopted in this country. It may be added, as a conclusion based on experience, that the treatment of American patentees in foreign courts is usually and on the whole conspicuously fair, and that, surprising as it may seem, it is apt, in case of opposition or infringement, to cost the patentee less to enforce his rights in a foreign country, Germany for instance, than in the United States.

The fairness and liberality of foreign courts and laws must not be understood as encouraging any looseness of practice in the preparation of foreign applications. These demand an accurate knowledge of the laws, forms and procedure which obtain in foreign patent offices, the ability to see that the points of the invention are brought out in the foreign specification fully and in proper technical form, and the services of trained and skillful foreign agents.

The fact that in some countries, as in France and Belgium, the application is not examined for patentability, that it must stand or fall after issue as originally filed, renders thorough preparation all the more important, as will readily be seen.

We Are Specially Equipped for Foreign Patent Work

With many years of special experience in the preparation and prosecution of foreign applications, with thorough familiarity with foreign patent laws and patent office procedure and with competent and reliable foreign agents, we can render service in foreign cases that is of the highest grade of efficiency, at the lowest possible charge consistent with good work.

We never advise taking out a foreign patent unless the invention belongs to an industry that has been developed and is conducted on a considerable scale in the country in question. Otherwise we do not permit a client to incur the expense of an application without first calling the facts to his attention.

Information and Advice

Our clients are at liberty to consult us freely as to the foreign countries in which there is a probable demand for inventions of the class to which theirs may belong; and this should always be done before ordering us to prepare applications unless the inventor is already well informed on the subject. We can always furnish facts and figures which will be of use to him. If circumstances limit him to a very small number of foreign patents we can always indicate those likely to be to his greatest advantage, and we are frequently able to save him unnecessary expense.

Where a number of foreign applications are made on the same invention there is a saving in preparation and translation which goes to the benefit of the client, still further reducing our very low charges. In such cases we can always furnish special estimates.

Foreign Applications. Advance Fee

When you have decided what foreign patents you will apply for send us $10 for each country. We will thereupon send you the formal papers in each case for signature, which you will return to us duly signed, with the balance of the charges according to schedule or estimate previously furnished.

What Our Charges Cover

The charges for patents for the countries mentioned below are for simple cases requiring not more than one sheet of drawings and only the usual amount of translation. In other cases, with the American specifications and drawings before us, we can always give you in advance the exact cost of the patent. Our figures in all cases cover the *entire* cost of obtaining the patent and include the taxes (where any are assessed) for the first year, and in Great Britain for four years, Australia for seven and New Zealand for four.

FOREIGN PATENTS—LEGAL POINTS

The term of nearly all foreign patents runs *from the day the application is filed and not from the date of issue,* as in the United States.

To insure a valid patent in most foreign countries the application should be filed before issue of the United States patent or within twelve months after the filing of the application here. The latter rule applies only to countries that are subscribers to the International Convention, a list of which is given elsewhere. But valid patents may be obtained in Canada for inventions patented here if applied for within one year after issue and before the expiration of one year of public use anywhere.

To insure absolute safety, foreign patents should be applied for before any disclosure of the invention here, except as it is necessarily disclosed, in confidence, to a patent attorney, draftsman, model maker, trustworthy witnesses or partners, and of course to the Patent Office. Canada may be again excepted, as the inventor's rights are there preserved as above stated, and for the reason that he, or his legal representative, is alone entitled to a patent.

In Canada actual manufacture must be begun within two years, and must be continued to such an extent as to render the invention accessible. In most other countries a nominal working that can be made at low cost through our agents will satisfy the law. In Germany working is not required from patentees who are citizens of the United States. Working is not required in Mexico.

German patents protect the invention in all the German colonies. The same is true of French patents.

British patents cover the British Islands only. Each British colony has its own patent system and issues patents through a patent office of its own or through a department of the colonial government designated for that duty.

It may be stated in this connection that United States patents do not cover colonial possessions, such as the Philippines. They can be made to do so by registration, for which a small fee is charged. The Hawaiian Islands and Alaska are territories, not colonial possessions, and are therefore covered by the United States patent.

PRINCIPAL FOREIGN COUNTRIES

Canada

The Dominion of Canada is an empire in extent of territory, and is increasing in population relatively faster than any other portion of the world. Its rapidly extending acreage under cultivation calls for more farm machinery, its mining interests are developing on an increasing scale, and its manufactures are stimulated and fostered by a protective tariff, even against the mother country. Commercial relations between this country and Canada are close and becoming closer. It offers an increasingly promising field for American inventors. It is a safe general rule, with some obvious exceptions, that an invention that is of real value here is worth protecting, and should be protected, in Canada.

The patent laws follow those of the United States very closely. The actual inventor, if alive and sane, must make the application, though he can, as here, assign the entire interest or a part thereof, with the request that the patent be issued accordingly. A Canadian patent may be applied for at any time within one year from the issue of the United States patent, but notice of intention should be given to the Canadian Patent Office within three months, as otherwise manufacture begun before issue of the Canadian patent may be continued after issue, without liability to the patentee.

Canadian patents are granted for six years, renewable for two successive terms of six years each. As no advantage is gained by payment in advance for the whole eighteen years, it is advisable to pay simply up to the end of the first six-year term.

The cost of a Canadian patent, paid up for six years, is $45, including our fees and one sheet of drawings. The Patent Office fee for six years' renewal is $20, alike for the second and third term.

Mexico

Our commercial and financial relations with Mexico are close and friendly. Over $900,000,000 of our money is invested in Mexico, mainly in transportation, manufacturing and mining. Manufacturing is on the increase. The courts give American inventors fair treatment and full protection. Patents for mining processes and apparatus and for agricultural machinery adapted for Mexican use are particularly valuable. The Mexican field for inventors is rapidly broadening.

The cost of a Mexican patent, full paid, is $70.

Cuba

Tools and machinery for use in sugar-making and manufactures of tobacco, and agricultural tools and machinery adapted for tropical use, should be patented in Cuba. Our trade as well as political relations with Cuba are close, and American inventors are sure of full protection.

The total cost of a Cuban patent (17 years) is $100.

Argentine Republic

This is the most enterprising and prosperous country of South America. Its citizens are almost entirely of European stock. It is well supplied with railways, both steam and electric, and its manufactures are growing rapidly to meet the demand for goods and machinery caused by the remarkable development of its agricultural resources. It is not to be overlooked, especially in the matter of farm appliances and machinery.

Patents are granted for five, ten or fifteen years. No renewals are granted, the applicant making his election as to the term for which he wishes to apply. The total cost is respectively $100, $130 or $190, according to the term.

Brazil

Brazil is the largest country, territorially, in South America, and the richest in natural resources. It is attracting a high class of European immigration, very largely German, and is growing in the right way. It will develop enormously in wealth and population in the twenty years next ensuing. Its laws are liberal and well administered. Like those of Mexico and the Argentine they favor and protect the patentee, and hold the infringer to a criminal as well as civil liability.

The total cost of a Brazilian patent is $120. Inventions must be worked (nominally) within three years, and, as in most European countries, there is after the first year an increasing annual tax.

Other Central and South American Countries

It may fairly be said that the cost of obtaining patents in these countries is in inverse ratio to their value. The less they are worth the more they cost. At the same time it is equally true that there are special instances where a certain invention applies directly to some one of the limited number of industries in a small country or colony, in which case it may be advisable to take out the patent. The Todd Bahama patents already referred to are a case in point. In such cases we are always glad to give our clients the benefit of what data we have on file, and to get for them official and special information.

Great Britain

In finance, trade and manufacturing England maintains her supremacy over the rest of Europe. In foreign commerce she still leads the whole world. British goods in British vessels go to all parts of the earth. Hardly a nation or tribe is so undeveloped or so remote that it does not contribute in some degree to the profits of British merchants and manufacturers. For mechanical inventions, electrical machinery and devices, and improved methods of manufacture it is the best market for the inventor outside of the United States. London is the financial center of the world, and patents for an invention of distinct merit, taken out in other European countries, can often be sold there to good advantage, sometimes better than in Berlin or Paris. Most inventions that have merit and commercial value here should be protected in Great Britain.

Patent Office procedure is now similar to that of the United States and Germany, except that the examination for patentable novelty is confined to British patents and goes back not over fifty years. The patent is granted to the inventor, the "communicatee" (first introducer), or the assignee. The expense of an assignment is considerable and can be avoided by having the assignee sign the application.

The British patent runs for fourteen years. Taxes begin with the fifth year. The patent covers Great Britain, but not the colonies. The cost, including our fees, is $65. The courts incline to liberality in the construction of patents and the determination of inventors' rights under them.

France

French manufacturers lead the world in the finer metal and textile work and in articles of luxury generally. They were first to take up and develop the automobile, which owes much to French skill and invention. It is one of the three foreign countries in which American inventions prove most valuable. The laws favor the inventor and afford him effective protection.

The French patent covers France and its colonies, and costs $65. There is a small annual tax. The term is fifteen years. The first applicant obtains the patent, whether he is the inventor or not.

Germany

German manufacturing interests, already very large, are expanding rapidly. German trade is crowding British trade in every accessible market, underselling wherever possible. Cost-saving inventions in all leading manufactures are of special value in Germany.

As in most European countries, any person may apply for the patent. Applications are examined for novelty. Patentees are thoroughly protected by the courts. Patents are issued for fifteen years, with an annual tax. No working is required from citizens of the United States owning German patents. Patents cover the German colonies.

Tools, articles for the household and farm, parts of machinery, fittings and what are termed "novelties" in this country may be protected by "Model" patents (Gebrauchmuster). These are easily obtained and run for three years, with the privilege of renewal for three years more. In the case of many inventions for which a full patent can readily be obtained in the United States, it is better in Germany to apply for the "Model" patent. These cases are usually clearly distinguishable, by a competent attorney familiar with the German rules and requirements, from those in which he is justified in applying for a full patent.

The cost of a German (full) patent is $65. The cost of a "Model" patent for three years is $35, and for three years' renewal $30 additional. There is no annual tax on a German "Model" patent.

Austria-Hungary

To cover both countries separate patents must be taken out. Patents run for fifteen years with an annual tax. The laws of both countries with regard to patents are in most respects similar to those of Germany. Examination for novelty is made in Austria, but is less thorough and severe than that made by the German Patent Office.

Austria and Hungary taken together have a population of fully fifty millions. Hungary and Russia are the grain fields of Europe. Austria has many manufactures, some on a large scale. It is now building thirteen battleships of the first class.

The cost of a patent is the same in each country, $70.

Russia

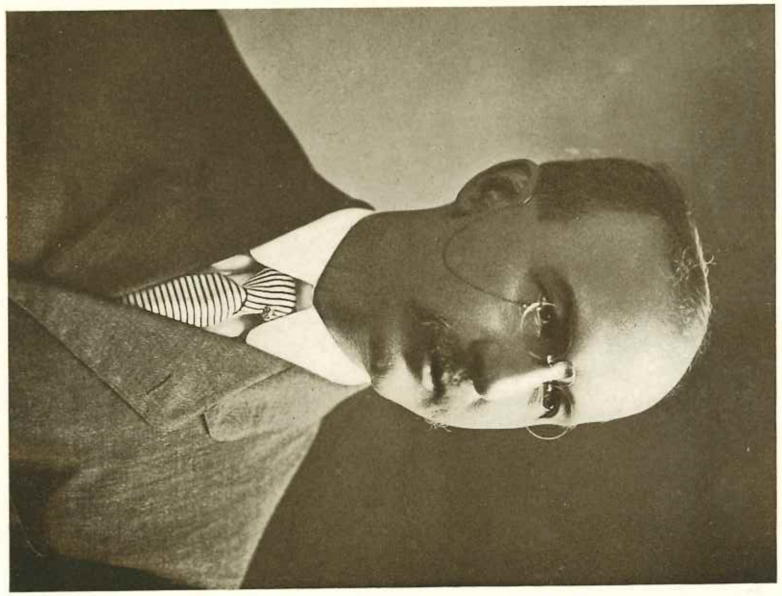
Improvements in agricultural machinery and in mining processes and apparatus are well worth patenting in Russia. There is considerable manufacturing, especially in metal and textile goods, the development of which has not been retarded by Russian political disturbances.

The Russian patent covers Russia, Poland and Siberia. The term is fifteen years, with an annual tax. The cost is $85.

Belgium

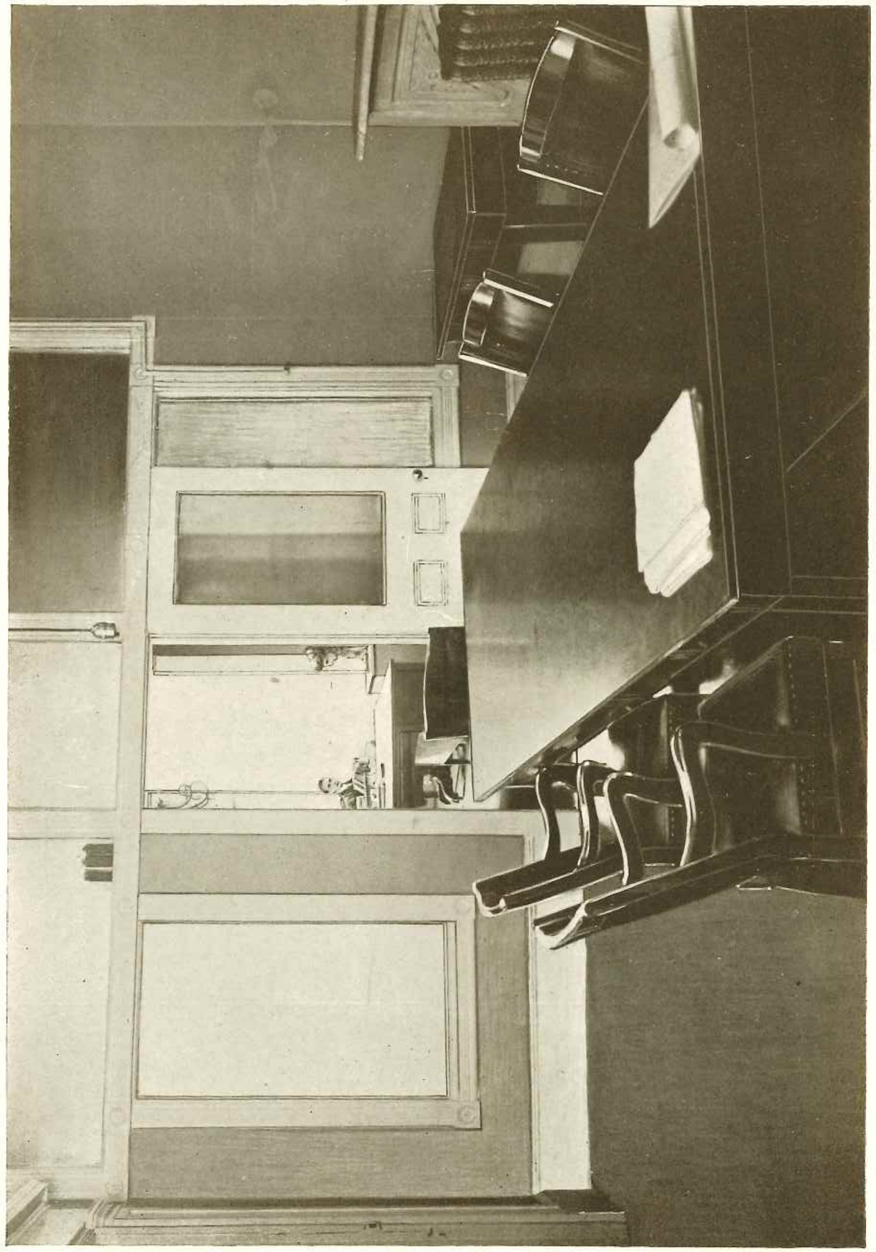
This is a small country, the population being between seven and eight millions, but it is one of the most important to the inventor. It has been an active manufacturing country since Flemish (Belgian) weavers and dressers of woolen cloth taught their art to Englishmen in the eleventh century. The term of a Belgian patent is twenty years, with an annual tax, and the cost is $40. The patent is issued to the first applicant, whoever he may be.

HUGH M. STERLING
Patent Expert and Attorney-at-Law; in charge of Patent Litigation



EDWARD L. GIES
Attorney and Counsellor at Law

MEMBERS OF OUR LEGAL STAFF



RECEPTION ROOM

Italy

While Southern Italy and Sicily are poor and unprogressive, Northern Italy, with its large infusion of the more energetic Teutonic blood, has always ranked high in commerce and manufactures. Modern banking originated in Venice. Florentine merchants were at one time the financial kings of Europe, and in the Middle Ages the armorsmiths of Milan were the best in their trade. There has been a marked industrial revival in Italy, which will be increased and stimulated by the development and use of water power in modern ways. Before deciding the question of foreign patents, the inventor should look into present industrial conditions in Italy.

The cost of an Italian patent is $60. There is a small yearly tax.

Smaller European Countries

The smaller countries of Europe all issue patents for inventions. They all have industries which warrant the inventor in taking out patents in special cases and in certain lines of invention. As to these he should obtain in each individual case the best information he can get by consultation with us or otherwise.

Japan

For many years after Japan opened its doors to the world it had no patent law. With characteristic shrewdness the Japanese realized that they were going through a process of adaptation and assimilation of foreign ideas and methods, largely industrial, and did not for a moment propose to increase the cost of it by protecting the foreign inventor. Its people began in time to show considerable inventive ability and its earlier patent legislation protected Japanese inventors alone. Finally, in deference to the representations of other powers, patents were granted to foreigners by the law of 1888. Subsequent enactments were more liberal, and today, in the protection it affords American patentees, Japan is well abreast of Germany. An infringer renders himself liable to fine and imprisonment, as well as civil damages. Japan is a great industrial country, a formidable commercial rival of the Western Powers in the markets of the Far East.

The cost of a Japanese patent is $90, with a moderate annual tax.

Australia

In the variety and extent of natural resources in proportion to territory Australia compares with any country in the world. It is developing rapidly in population and wealth, and its condition is one of marked prosperity. Australians make money rapidly and spend it freely. Its manufacturing industries are growing and becoming more diversified. It is a large wool-producing country, and its mining industries, especially gold, copper and coal, have made many fortunes and will make many more. It is a "live" country.

The total cost of an Australian patent is $90. The term is fourteen years. Taxes do not begin till the end of the seventh year.

New Zealand

The colonial government has, in cases where an invention appeared to be of distinct value to the colony, purchased the patent outright, giving the free use of the invention to all its citizens. In the case of the "cyanide" process for gold ores the price paid to the inventors is said to have been $600,000. The production of gold for 1910 was $86,000,000, made possible by the process so purchased.

New Zealand is an enterprising and rapidly growing country, with many sources of wealth beside mining.

The cost of a patent is $60, without tax till the end of the fourth year. The term is fourteen years.

PARTIAL LIST OF OTHER FOREIGN COUNTRIES

With regard to the other countries "east of Suez" careful study of their industrial conditions and of the adaptation of the invention to them should be made before deciding to apply for letters patent. In such cases we are glad to assist with information and data, and where such patents are desired will quote as low a figure as the official fees and taxes permit us to do.

We give below a partial list of other countries and colonies which are worth considering in the case of some inventions. Careful discrimination should be exercised as to the adaptability of the invention and the probable demand for it.

Bolivia, all taxes paid	$275
Cape Colony, taxes paid for 3 years	110
Ceylon, taxes paid for 4 years	120
Chile, all taxes paid	180
Colombia, all taxes paid, 5-year patent	125
" " " " 10-year "	160
" " " " 15-year "	210
Costa Rica, all taxes paid	125
Denmark, taxes paid for 1 year	70
Ecuador, all taxes paid	200
Egypt, registration tax paid	75
Finland, taxes paid for 1 year	80
Guatemala, all taxes paid	200
Holland, taxes paid for 1 year	90
Honduras, taxes paid for 3 years	150
India, taxes paid for 4 years	75
Nicaragua, taxes paid for 1 year	170
Norway, taxes paid for 1 year	70
Panama, all taxes paid, 5-year patent	$150
" " " " 10-year "	180
" " " " 15-year "	270
Paraguay, all taxes paid	320
Peru, all taxes paid	200
Philippines, registration of U. S. Patent	20
Porto Rico, registration of U. S. Patent	20
Portugal, taxes paid for 1 year	60
Roumania, taxes paid for 1 year	80
Salvador, all taxes paid	225
Spain, taxes paid for 1 year	65
Sweden, taxes paid for 1 year	70
Switzerland, taxes paid for 1 year	65
Turkey, taxes paid for 1 year	100
Venezuela, all taxes paid, 5-year patent	190
" " " " 10-year "	240
" " " " 15-year "	300

All charges quoted on foreign patents include translation up to 1,000 words. Our charges for additional translation are $1 per hundred words for German, French, Spanish, Swedish, Danish and Norwegian, and $2.50 per hundred words for other languages. We can furnish close estimates for other countries and colonies. A certain measure of protection can now be obtained in China by consular registration at a usual cost of $100. Holland has recently adopted a patent law.

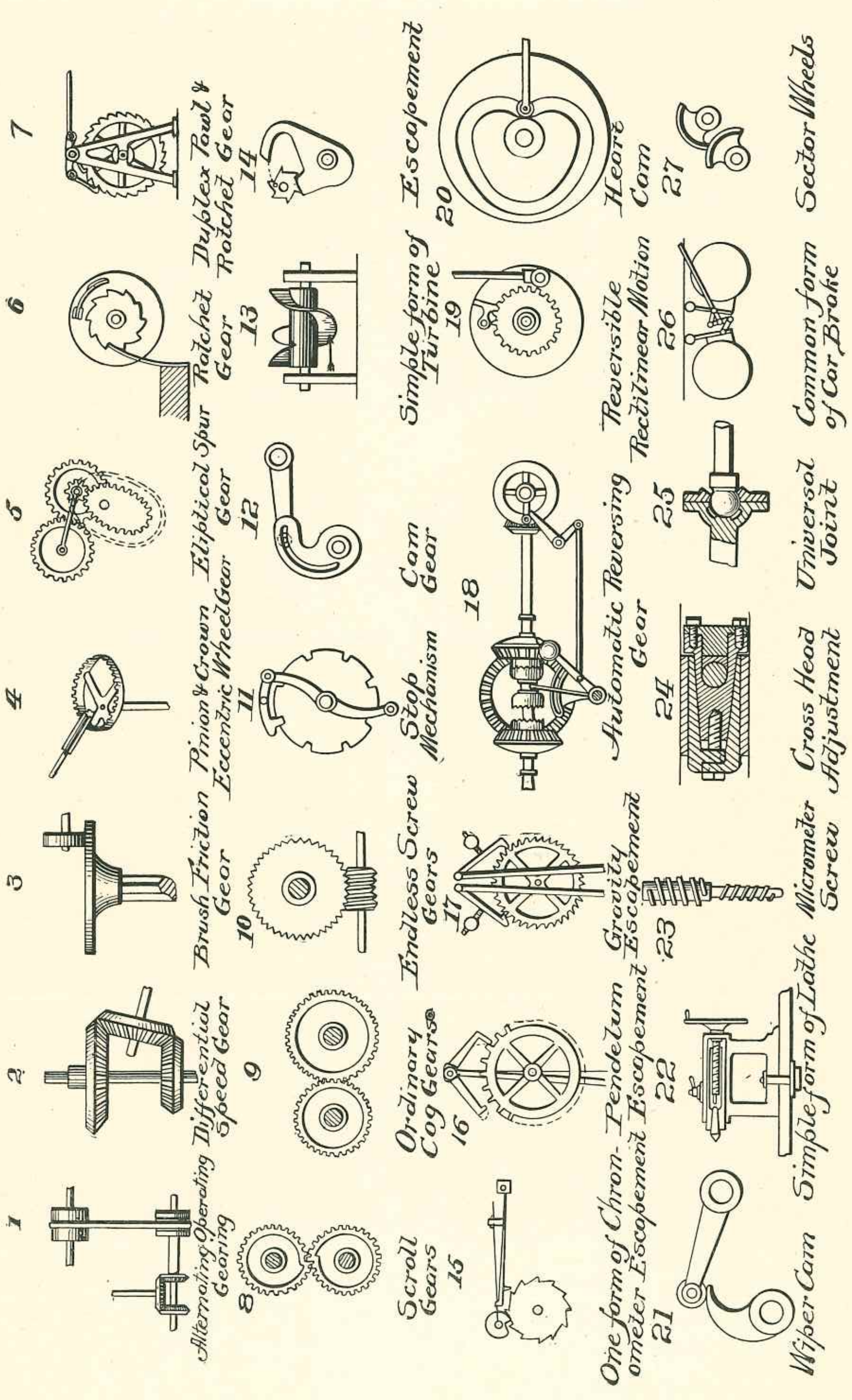
In applications for British and German full patents we do not undertake to refund fees if the application is rejected. The German Patent Office rejects some applications which would be allowed under the American practice. This does not, however, apply to the German "Model" or "Gebrauchmuster," patent hereinbefore described, on which we always refund our attorney's fee if the application is rejected. The British Patent Office is operating under a new law and its practice is not wholly settled, some of its recent actions being even more technical than those of the German Patent Office.

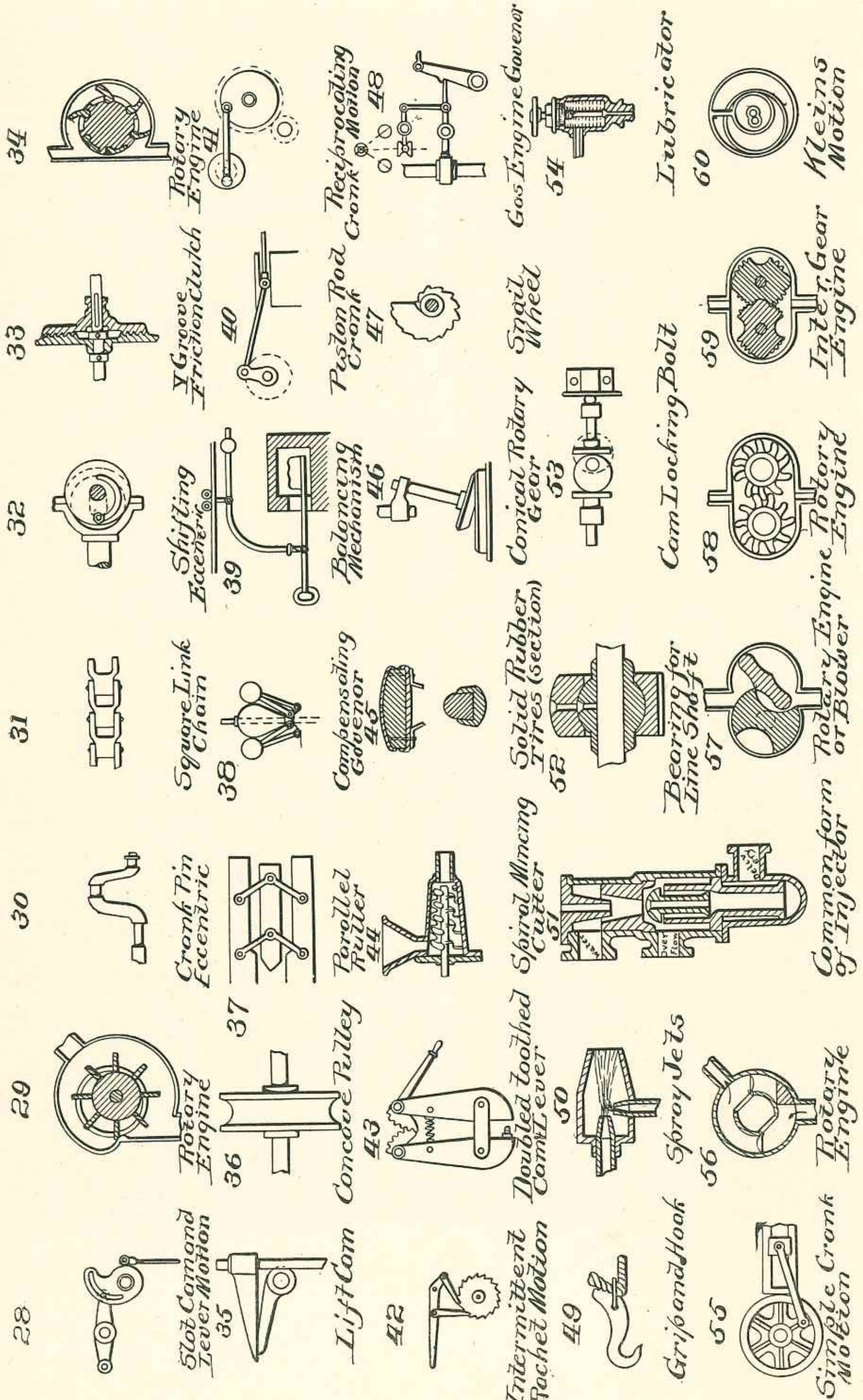
Otherwise, and in whatever other country of the world an application is filed through us, we agree that, if it is finally rejected for any reason whatever, *we will return all fees paid us for the preparation and prosecution of the case,* said fees being exclusive of the foreign fees and our foreign fees, the amount returnable in each, being approximately $20.

SOME EXAMPLES

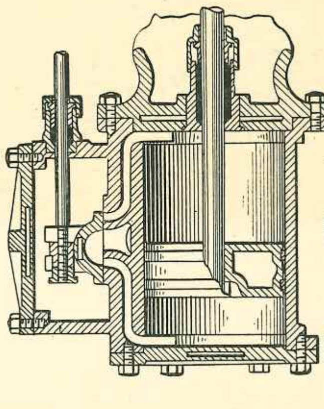
OF

MECHANICAL MOVEMENTS


1
Alternating Operating Gearing
2
Differential Speed Gear
3
Brush Friction Gear
4
Pinion & Crown Eccentric Wheel Gear
5
Elliptical Spur Gear
6
Ratchet Gear
7
Duplex Pawl & Ratchet Gear
8
Scroll Gears
9
Ordinary Cog Gears
10
Endless Screw Gears
11
Stop Mechanism
12
Cam Gear
13
Simple form of Turbine
14
Escapement
15
One form of Chronometer Escapement
16
Pendulum Escapement
17
Gravity Escapement
18
Automatic Reversing Gear
19
Reversible Rectilinear Motion
20
Heart Cam
21
Wiper Cam
22
Simple form of Lathe
23
Micrometer Screw
24
Cross Head Adjustment
25
Universal Joint
26
Common form of Car Brake
27
Sector Wheels

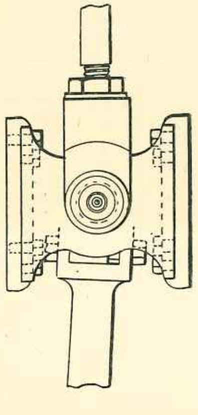

28
Slot Cam and Lever Motion
29
Rotary Engine
30
Crank Pin Eccentric
31
Square Link Chain
32
Shifting Eccentric
33
V Groove Friction Clutch
34
Rotary Engine
35
Lift Cam
36
Concave Pulley
37
Parallel Ruler
38
Compensating Governor
39
Balancing Mechanism
40
Piston Rod Crank
41
Reciprocating Crank Motion
42
Intermittent Rachet Motion
43
Doubled toothed Cam Lever
44
Spiral Mincing Cutter
45
Solid Rubber Tires (section)
46
Conical Rotary Gear
47
Snail Wheel
48
Gas Engine Govenor
49
Grip and Hook
50
Spray Jets
51
Common form of Injector
52
Bearing for Line Shaft
53
Cam Locking Bolt
54
Lubricator
55
Simple Crank Motion
56
Rotary Engine
57
Rotary Engine or Blower
58
Rotary Engine
59
Inter Gear Engine
60
Kleins Motion

61



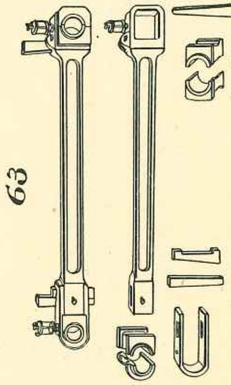
Steam Engine Cylinder

62



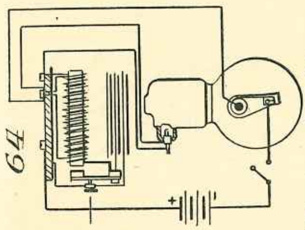
Crosshead

63



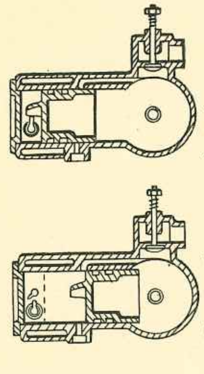
Connecting Rods

64



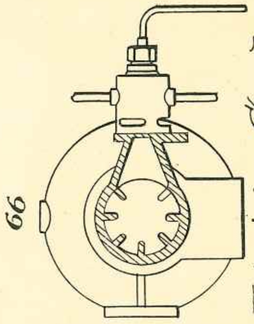
Wiring System for Gasoline Engines

65

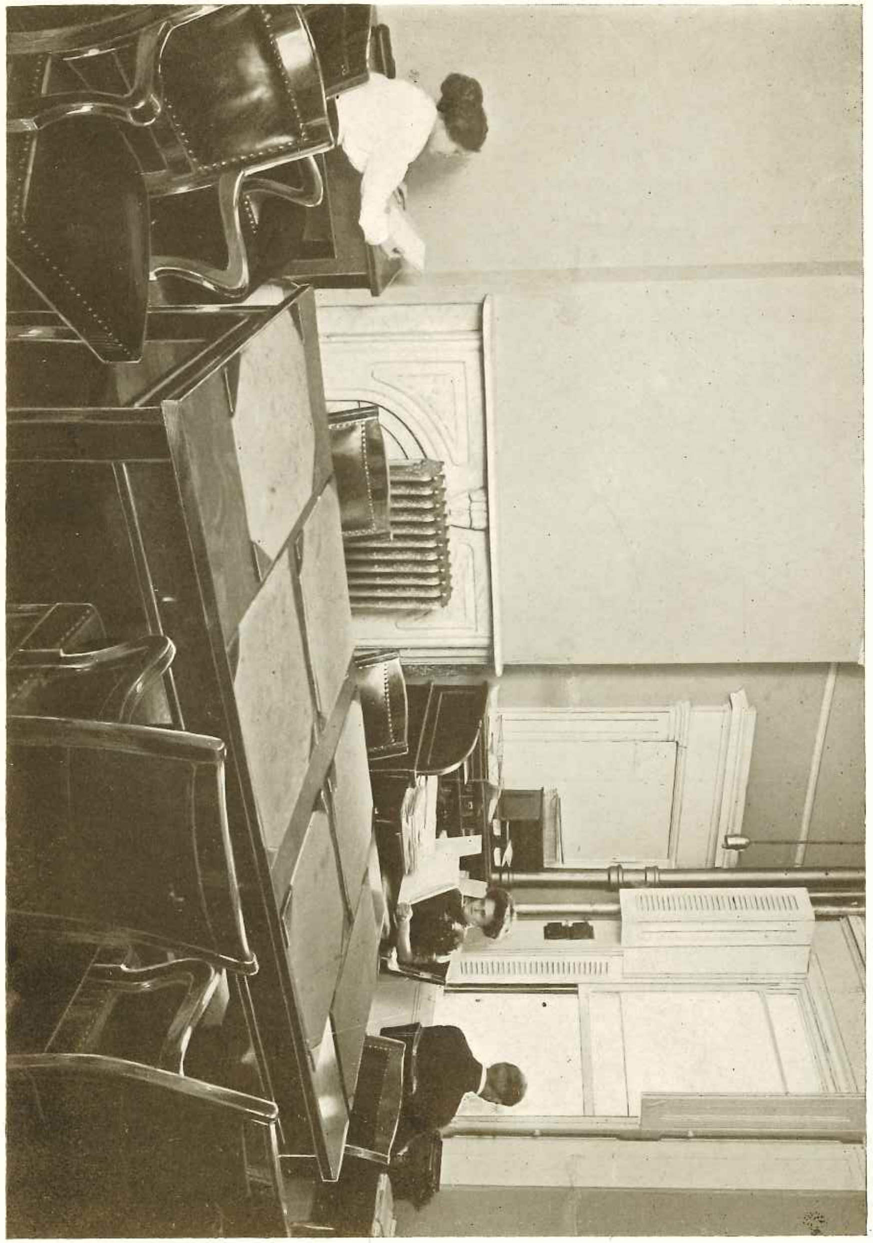


Two Cycle Gasoline Motor

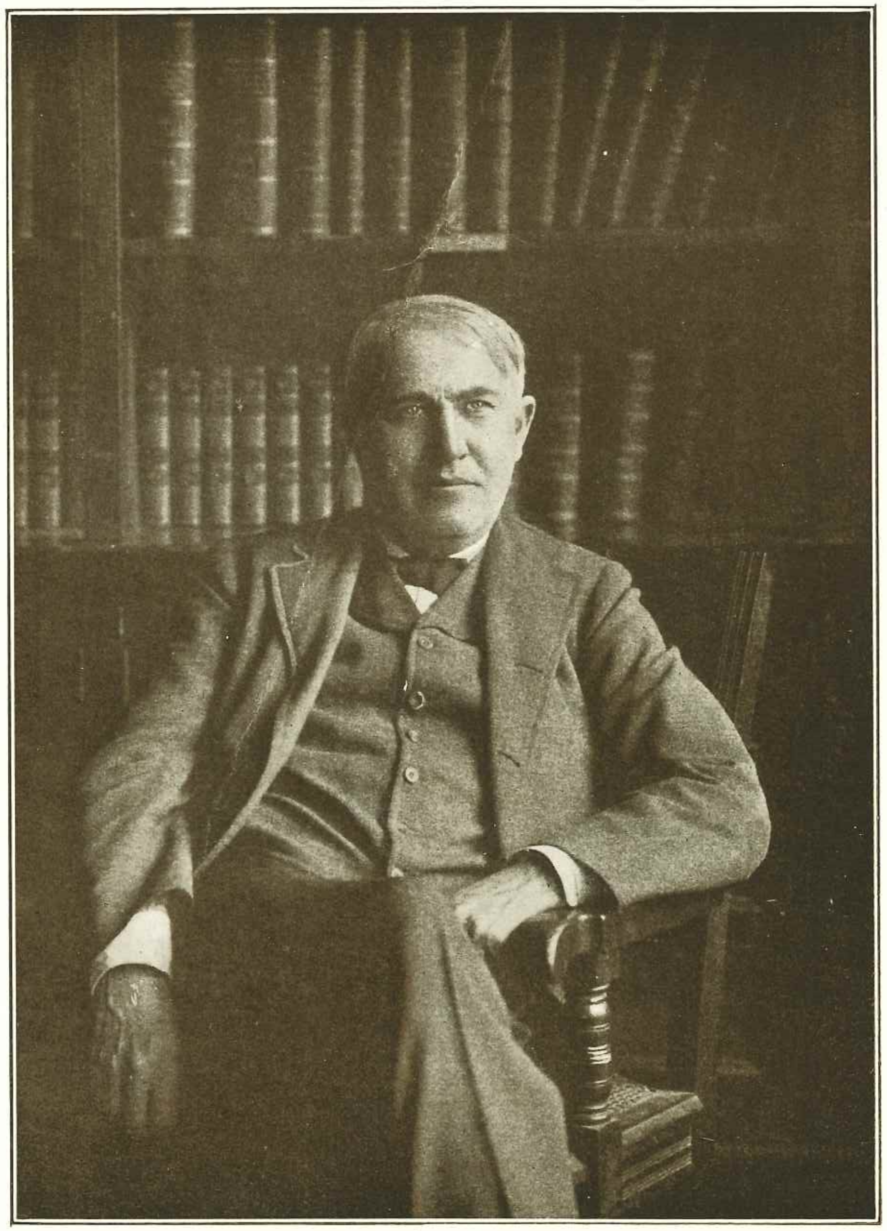
66



Vaporizing Chamber



DIRECTORS' ROOM



THOMAS A. EDISON

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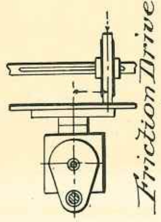
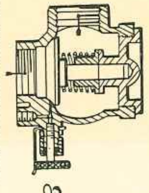


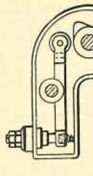
Friction Drive

68



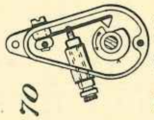
Mixing Valve

69



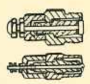
Contact Breaker

70



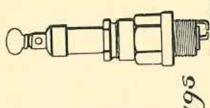
Contact Breaker

71



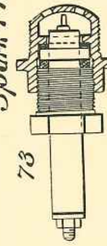
Spark Plugs

72



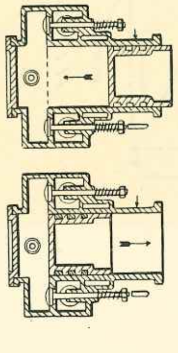
Spark Plug

73



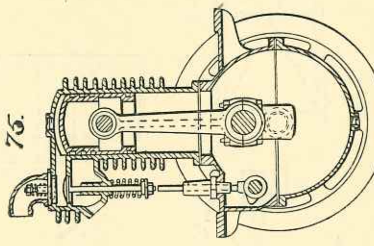
Spark Plug with Combustion Chamber

74



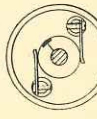
4 Cylinder Motor

75

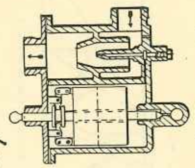


Air cooled Motor

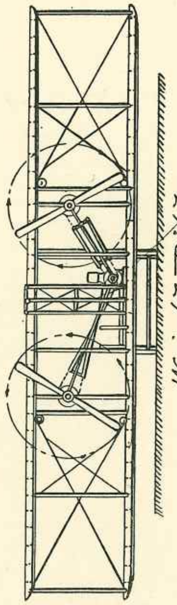
76



Wiping Contact Commutator

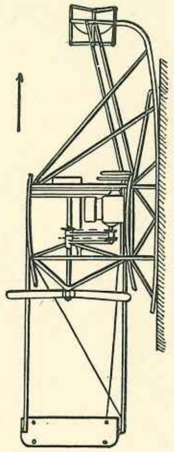


Carburator



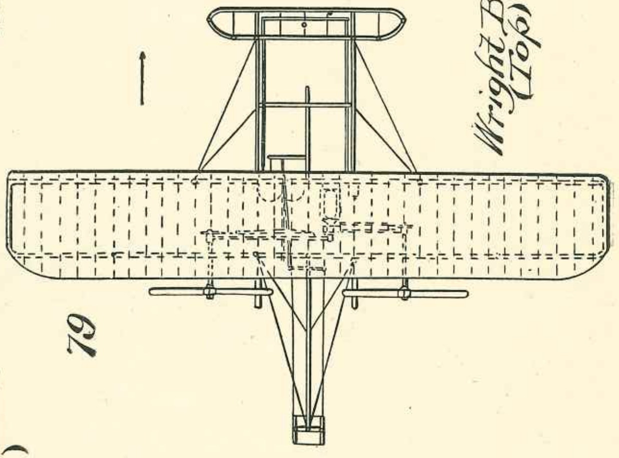
78

Wright Biplane (End)



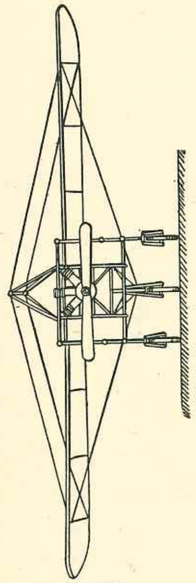
77

Wright Biplane (Side)



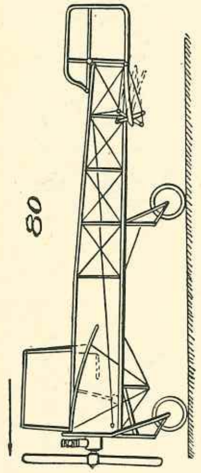
79

Wright Biplane (Top)



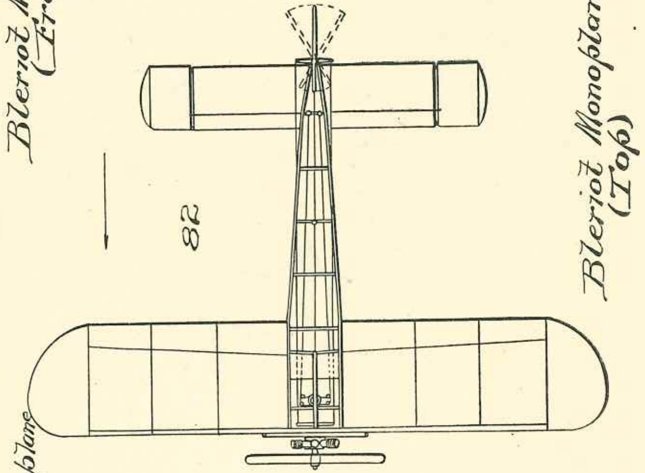
81

Bleriot Monoplane (Front)



80

Bleriot Monoplane (Side)



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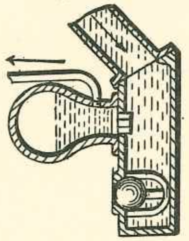
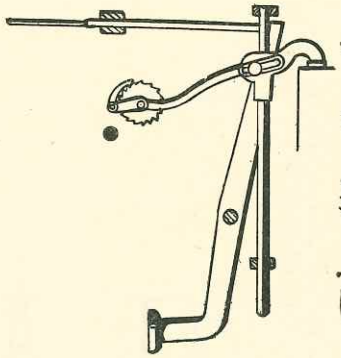
Bleriot Monoplane (Top)

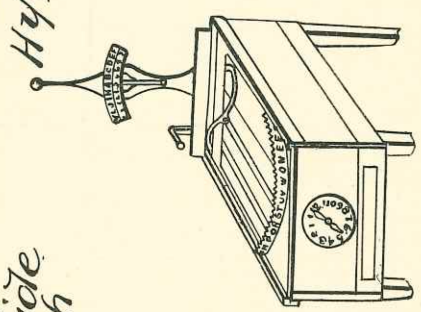
Knuckle or Rule joint



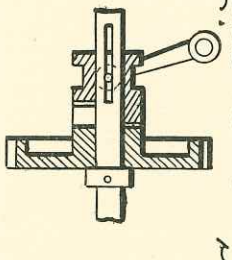
Hydraulic Ram



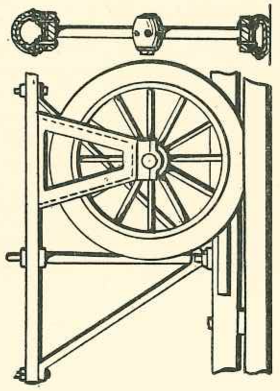
Simple Cash register key movement



The original Typewriting Machine Patented by W. A. Burt July 23rd 1829



Common side Clutch



Original pneumatic tire Patent Patented by R. W. Tompson May. 8. 1847

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